

THE ARCHAEOLOGY OF CAVES IN IRELAND



Marion Dowd

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*for my son,
Fiachra Olcán*

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Front Cover: Plunkett Cave, Kesh, Co. Sligo (Thorsten Kahlert)

Foreword

Some years ago I wrote a little book on *An Archaeology of Natural Places*. After several false starts, I began it with a sacred cave in Finland, which I then compared with similar sites in Crete. To some extent the argument was based on Saami ethnography in Northern Europe and on the writings of Pausanias in the Classical world. Here the archaeological record could be studied alongside traditional beliefs. This seemed to be an unusual situation in a European archaeology which is commonly dominated by accounts of monuments.

As a critic of my book was right to point out, the same combination of sources was available in Ireland, but at the time I was not aware of their extent and depth. Now there is no excuse. Marion Dowd's book draws on this rich body of evidence to offer a study of caves and their uses from the Mesolithic period to the present day. The result is a parallel narrative to the more usual accounts of prehistoric and historical archaeology in Ireland, and in some cases it is the caves themselves that take centre stage. That is especially apparent from her studies of Neolithic burials and Bronze Age votive deposits. Where they play a smaller role, as they do in the Iron Age, their importance is not diminished, for any account of this period would be incomplete without them.

The blend of archaeology, archive sources, literary evidence, place names, myths and historical texts is deftly handled, and the book benefits greatly from the results of Marion's own fieldwork which has added significantly to what was known before. It is no mean achievement to have brought these different elements together in a study that reads so well and is so effectively illustrated. It shows what an archaeology of 'natural places' can achieve in the right hands.

Stuart Piggott once complained that he had written an introduction to a book which contained a misprint that transformed his contribution into a call to arms – he had written a *Foreword*, but it came out as *Forward*. Marion Dowd does issue a challenge to archaeologists who are overly concerned with what remains on the surface. In taking her readers underground and showing them unfamiliar and exciting things, she sets a new agenda for Irish archaeology and provides a model for research in other countries. This book has a depth and richness of which I was unaware when I was writing all those years ago. Now I realise that I shared my innocence with other people. That is why the publication of *The Archaeology of*

Caves in Ireland is so welcome.

Richard Bradley

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List of Abbreviations

AMS	Accelerator mass spectrometry
ASI	Archaeological Survey of Ireland
DEHL	Department of the Environment, Heritage and Local Government (now the NMS)
frag.	fragment
HG	Heritage Council
HRICP	Human Remains from Irish Caves Project
ICAP	Irish Cave Archaeology Project
IRGHS	Irish Research Council for the Humanities and Social Sciences (now Irish Research Council)
L	– left
MNI	minimum number of individuals
mth	month
NFC	National Folklore Collection
NISM	Northern Ireland Sites and Monuments Record
NMI	National Museum of Ireland
NMS	National Monuments Service
OS	Ordnance Survey
R	– right
RIA	Royal Irish Academy
RMP	Record of Monuments and Places
RSAI	Royal Society of Antiquaries of Ireland
SMR	Sites and Monuments Record
SUI	Speleological Union of Ireland
Top. files	Topographical files in the National Museum of Ireland, Antiquities Division
UGC	University College Cork
UGD	University College Dublin
UM	Ulster Museum
yrs	– years

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Many of the artefacts from Ireland's caves had never been previously illustrated and an aim of the ICAP was to rectify this situation. A selection of artefacts were expertly illustrated by Malgorzata Kryczka and photographed by Thorsten Kahlert; the value of their work can be seen throughout these pages. Thorsten has played a particularly important role: apart from patiently taking and retaking numerous artefact photographs, he also prepared all the images for publication, produced all the maps, contributed to the appendix of sites, and provided valuable advice on layout and image editing. I would like to warmly thank him for his cheerful professionalism and expertise.

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Finally, Fiachra, this book is for you. To paraphrase Seamus Heaney: you blew my heart wide open.

Preface

I would like to say that I was fascinated by caves as a child ... but I was not. Before the age of 20 I had only been to one cave – Ailwee show cave, Co. Clare – on a school tour when I was 8 or 9 years old. It left no lasting impression. I occasionally encountered caves in Enid Blyton's *The Famous Five* but that simply reinforced how unattractive the underground was. By 1995 I was embarking on a two-year MA in Archaeology at UCC. I had just completed a three-year BA degree in Archaeology during which time only one Irish cave of archaeological significance had been mentioned. Caves, it seemed, did not exist or were of little consequence. When the time came to select a research topic for the second year of the MA, I considered several different options; my interest lay in the Mesolithic but I was not particularly keen on lithics. Eventually, my supervisor Professor Peter Woodman suggested that 'someone needs to look at caves'. I accepted the challenge but my concern was that there would not be enough material to develop into a thesis. I brought with me the same set of misconceptions that most people share. I anticipated plentiful evidence that prehistoric people lived in caves; I did not expect to find any Early Medieval or historic material in the assemblages; and I did not think there were many cave sites. I was wrong on all accounts.

I have worked in archaeology since my university days and have had the opportunity to develop my interest in Irish cave archaeology, principally through doctoral research. The most important insights, however, have come from working and spending time in caves. I have visited somewhere in excess of 100 caves and have spent hundreds of hours underground – sometimes as part of an excavation team or caving group, sometimes alone. It is only by spending time underground that one can appreciate just how varied cave landscapes can be. We tend to imagine broad dark passages stretching to infinity. In reality many of the caves selected for use in the past are narrow cramped passages, some are wet and uncomfortable, others are complex systems, several are quite dangerous. The vast majority of people at present (including archaeologists) have little or no understanding of what it is like to spend time underground or to move through a cave – show caves are not representative.

In my experience, people are rarely if ever indifferent to or unaffected by the cave environment. The emotions experienced underground vary, though the most persistent seems to be fear, ranging from mild anxiety (Does that boulder look like it's about to

collapse?) to panic (I am 2km underground, completely wedged between two walls of solid rock, and cannot move). Closely linked to this is the adrenaline high after successfully navigating a difficult stretch of cave passage, perhaps part that was submerged underwater or a particularly narrow crawl. Some people feel serene in caves, without the distractions the eyes and ears are accustomed to in the outside world. Various archaeologists I have worked with have expressed sentiments as diverse as feeling a cave was 'dirty' and the need to 'get out', to slight agitation when emerging from a cave to be met by sunshine, colour, life and noise. Dreaming about the subterranean tends to be a common experience for those working on cave excavations. What all this tells me is how easily people relate to caves and the degree to which they impact upon our subconscious.

This book is the fruition of research that began in 1996 and has continued intermittently since then. Along the way I hope I have gained some appreciation of how important caves were to people in the past. Many caves that I have visited or worked in tell a very human tale from the Early Medieval ringed pin concealed under a stone in Glencurran Cave, to the remains of a teenage boy who died in Moneen Cave just a few centuries ago. Some of the theories presented here may change with time, but I believe this text to be a mark of where Irish cave archaeology stands at present. I hope this book serves to raise awareness of, and interest in, Irish cave archaeology, to inform wider archaeological discourse, to contribute to international cave archaeology studies, to stimulate future research projects and, most importantly, to be an interesting read.

Dromahair, Bealtaine 2014

It is best that we always begin in darkness

from *Cave Poem* by Dave Lordan

Chapter 1

People in Caves, Caves in People

Caves are one of the most enduring natural features in the Irish landscape. At present, approximately 980 caves are documented scattered across limestone regions of the country; 91 of these are registered archaeological sites. Archaeological discoveries have been made in caves since the 19th century but until quite recently they have scarcely featured in Irish archaeological research. One reason for this neglect is that caves are not readily identifiable as archaeological sites. Historically, caves were investigated by scholars from geological and palaeontological backgrounds. Nowadays, archaeological discoveries underground are usually made by cavers and rarely by archaeologists. In many ways caves resemble cabinets of curiosities – underground repositories of jumbled and varied multi-period collections of artefacts and bones each with their own story to tell. As research develops and the archaeological potential of caves is increasingly recognised, the number of caves of archaeological significance in Ireland is growing. When associated fields of scholarship are considered – such as popular religious practices, ethnohistory and folklore – we are left in no doubt as to the cultural importance of caves. With that in mind, this book provides a synthesis of what we currently know about how caves were used and perceived by communities spanning the 10,000 years of human occupation of Ireland, from the earliest Mesolithic hunter-gatherers to the 21st century urban dweller.

THEATRES OF INTENT

As enclosed, protected underground spaces, caves offer enormous potential. Throughout millennia people have recognised this potential and have used caves to meet a diverse range of religious and practical requirements. For the entirety of Irish prehistory the archaeological evidence reveals that the primary role of caves was as theatres of ritual. That is not to say that caves were never used for mundane purposes – certainly there is some evidence to suggest that Mesolithic hunter-gatherers may have sought out the shelter of caves on

specialised foraging trips, and Bronze Age people occasionally used caves for short-term occupation. However, the close association between caves and ritual in prehistoric Ireland is undeniable, complementing the evidence from Europe and further afield (e.g. Moyes 2012a). As Clottes (2012, 25) powerfully reminds us, the use of caves for ritual activities is the oldest and most enduring religious tradition in the human history of the world. Though Ireland adopted Christianity as the dominant religion from the 5th century ^{AD} onwards, caves continued to be incorporated into religious practices through an association with saints and monastic foundations. They were sometimes also used for burial and veneration. However, Christianity heralded a notable transformation in how caves were perceived and used. For the first time there are clear indications that caves were inhabited for lengthy periods of time, as well as functioning as storage spaces, workshops, hideaways and hideouts. Folk traditions and historical sources indicate an even wider range of human interactions with caves in recent centuries (Figure 1.1).



Figure 1.1 Cave E, Kesh, Co. Sligo. Trial excavations in 1901 did not reveal archaeological deposits in this cave, but 19th century folklore claims it was home to a hermit. In recent years it has become a focus for Neopagan ritual (Photo Marion Dowd)

IN THE DEEP DARK SILENCE

The enduring association between caves, ritual and religious life on a

European scale is something that has been explored by many archaeologists over the past 25 years (e.g. Skeates 1991; 2010; 2012a; 2012b; Whitehouse 1992; Sieveking 1997; Barnatt and Edmonds 2002; Lewis-Williams 2002; Davies and Robb 2004; Dowd 2008; Ustinova 2009; Mlekuž 2011; 2012; Bjerck 2012; Clottes 2012). The unique environment of caves lies in stark contrast and opposition to the world aboveground, the world that humans understand and inhabit. Entering caves involves a descent into darkness, incorporating several distinct stages or boundaries that can be seen as liminal and symbolic (Figure 1.2). The daylight zone of caves receives natural light and is typically where people seek shelter and where occupation debris occurs. In dry caves the daylight zone can be comfortable and accommodating, providing ready-made and convenient shelter from the elements. Caves, therefore, can be easily transformed into homes for various periods of time. Occupation is not necessarily always secular. Documentary sources are replete with references to hermits who retired to caves for religious retreat. Outer areas of caves were also sufficiently potent that they became foci for ritual activities. Cave entrances – the physical threshold that marks departure from the world of the living and entry into the subterranean realm – were particularly redolent with significance. In Mesolithic and Neolithic Ireland, for instance, token deposits of disarticulated human bones were most frequently focused on cave entrances (Dowd 2008). Powerful cultural sanctions may have inhibited entry deeper underground.



Figure 1.2 Entering Cave K, Kesh, Co. Sligo (Photo Ciarán Davis)

Moving deeper into caves, the twilight zone bridges the outer, naturally lit chambers of caves and the penetrating darkness of deep underground. The twilight zone is not fixed; it changes depending on the orientation of the cave, the time of day, and the seasons. This zone is most clearly representative of a transition point marking the

boundary between light and darkness. It is little wonder, therefore, that this area often receives special attention. During the Bronze Age, for example, an artificial cairn was constructed in the twilight zone of Glencurran Cave, Co. Clare where it appears to have signalled a physical and spiritual transition into the darkest part of the cave (Dowd 2009). It has been argued that Neolithic and Bronze Age cave paintings in the twilight zones of Norwegian caves may have been linked to rites of passage involving the transition from childhood to adulthood (Bjerck 2012, 60).

Archaeological deposits in the dark zones of caves relate primarily to religious activities. Secular activities do not take place deep underground, except perhaps for the concealment of valuables or people. The dark zone is the most powerful part of a cave in terms of its effect on humans: 'this is an ancient, undisturbed darkness, a darkness that has been here since the dawn of the world' (Jenkins 2009, 130). There is no sound but permanent silence, no temperature change but permanent coolness. When sound occurs, such as dripping water, it can be amplified by human imagination and the surrounding silence. Voices and noises echo. Disorientation is common, and also the sense of being overwhelmed by the darkness and what it hides or contains. Temperatures in the dark zone of Irish caves remain at about 8–10°C throughout the year, with no perceptible change from day to night or from season to season. This contributes to a sense that caves are lifeless and still which can be particularly disorientating when emerging from a cave into the outside world of life, light, colour and movement.

The dark zone is an area where, to the naked eye, nothing grows or lives yet caves can also appear to be animated spaces. When moving through the dark zone, the underground landscape and its features can only be observed by pausing and using a light to look about. Naked flames play off cave walls and ceilings creating shadows and a sense of movement. Shapes appear and disappear from the shadows. Parts of caves that are hidden are revealed only to disappear again into darkness. With each movement of the human body and the source of light, new features are exposed and brought into focus. In this way no two journeys into a cave are the same. Thus while the sense of permanence, silence and stillness of caves is prominent, caves are also landscapes that change in appearance and offer diverse experiences. It is not difficult to appreciate how caves may have been perceived as physical manifestations of the Otherworld, or at least liminal zones that permitted communication with the realm of spirits and the deceased. The presence of animal and human bones scattered over cave floors may have emphasised an association between caves and death.

The impenetrable darkness of caves is profound and is unparalleled in the natural world where even at night there is starlight, moonlight or firelight. This characteristic was important for some religious practitioners. In Ireland this is most apparent during the Late Bronze Age when individuals travelled deep underground into the darkest and quietest parts of caves to leave votive deposits and bones of the dead. That these offerings were usually left exposed on cave floors and not buried is testimony to the apparent generalised phenomenon that people did not venture deep underground, and that caves were off-limits for the majority of the population. Such journeys may have been part of ritual retreats that were undertaken as part of spiritual practices or to facilitate communication with the spirit world. The deepest underground chambers and passages offered a unique form of privacy, seclusion and secrecy to ritual specialists and shamans who sought to avoid the distractions of the outside world and other people (Figure 1.3). Deep caves provided a setting that is conducive to entering altered states of consciousness, allowing people to access deeper levels of knowledge and awareness, and to communicate with their own subconscious or the spirit world.



Figure 1.3 The dark zone of Glencurran Cave, Co. Clare. This area was a focus for votive deposition during the Late Bronze Age. Deposits included human clavicles, newborn domesticates, amber beads, lithics and pottery (Photo Ken Williams)

FEELING THROUGH THE DARK

When all at once, you stand on the verge of the descent, and look from the

chilling day into the pitch darkness of this gaping orifice, repelling and chilling the curiosity that it excited, – giving a promise of something to be discovered, and a threat to the discoverer, – suggesting a region to be traversed so different from our own fair familiar world, and yet a nameless danger to be incurred in the progress, – your heart must be either very callous or very bold, and imagination entirely a blank, if, at the first glance, you feel no unusual stir within you (P. 1832, 73).

Emotional responses to caves vary enormously. However, historical, ethnographic and modern accounts reveal that the most prominent emotion that human beings feel when underground is fear – ranging from mild anxiety to paralysing terror and claustrophobia (Figure 1.4) (e.g. Löffler 1983, 117; Bjerck 2012). Caves evoke a variety of fears: fear of the unknown; fear of getting lost; fear of becoming trapped; fear of encountering dangerous or frightening animals (bats, badgers, foxes, wolves, bears); fear of injury or fatality; and fear of meeting the unimaginable or the supernatural. As captured nicely in *The Hobbit*: ‘That, of course, is the dangerous part about caves: you don’t know how far they go back, sometimes, or where a passage behind may lead to, or what is waiting for you inside’ (Tolkien 1937). The Irish prehistoric evidence indicates that journeys into deep caves were rare events – probably in part curbed by fear. Medieval mythology depicts caves as malevolent and fearful places. Similar associations are found elsewhere in the world. The fear Palestinian Muslims feel about certain caves inhibits them from ever venturing inside. Certain other caves are only visited by day because the *wahrah* (condition of inspiring awe) is so strong (Taylor 1993, 158).

That caves equate with fear and death is even apparent in the Irish language. The word *uath* means fear, horror or terror, but it can also signify cave. Similarly, the word *uamhain* – which is related if not derived from *uamh* (cave) – denotes fear, terror, or a terrifying appearance. Furthermore, in some early texts *uamh* can signify a grave, tomb, crypt or vault (Toner *et al.* 2007; Condon 1942). Native Irish speakers nowadays sometimes use the word *uaimh* (cave) to signify grave (*uaigh*).

In stark contrast to the real and imaginary fears that the subterranean world can elicit, caves are conducive to states of anoesis. Some (rare) individuals feel more comfortable and relaxed underground than anywhere in the built or natural landscape. Some individuals experience profound feelings of serenity and safety in caves. The calmness that caves can induce partially explains why contemplatives through the ages and from diverse religious traditions have retired underground in search of spiritual enlightenment, ranging from early Christian anchorites to Buddhist monks. The Hindu-Christian monk Swami Ab-hishikatananda (1910–1973) described how in his Indian cave retreat he came to understand ‘what

is beyond silence ... beyond time and space, alone in the very solitude of alone' (Oldmeadow 2008, 12). British Buddhist nun Tenzin Palmo spent 12 years in solitary retreat in a cave in the Himalayas between 1976 and 1988 (Mackenzie 1999). In terms of the Irish archaeological record, there are several references to Christian cave anchorites in Medieval times. It is likely that prehistoric ritual practitioners also retreated to caves, and there is tentative evidence for this during the Late Bronze Age. One hint of ritual retreat is the presence of habitation debris deep underground in the dark zone.

From the earliest tourist excursions into caves, people have commented on the awe-inspiring beauty of large 'decorated' caves (i.e. caves with formations such as stalagmites and stalactites, collectively known as speleothems). Journeys underground can be pleasurable and enjoyable, resulting in feelings of contentment, happiness, awe and joy. That is certainly the case for many people in terms of the modern show cave experience.

The pursuit of excitement and adventure is now one of the most compelling motivations behind excursions underground. Caving is a challenging sport both mentally and physically, but can be very rewarding. Cavers speak of the exhilaration and adrenaline rush when a torturous cave passage is successfully traversed or when a new cave chamber is discovered. Caving can engender feelings of pride and a sense of accomplishment after extremely difficult sections of caves are navigated. People in the past may sometimes have explored caves driven by the same motivations and feelings as experienced by the modern caver.

SENSUOUS SPACES

The unique environment of caves and its impact on the physical, sensory and emotional self was fundamental to how past populations engaged with the underground. Much has been written about the sensory deprivation and stimulus hunger experienced within caves (e.g. Lewis-Williams 2002; Barnatt and Edmonds 2002; Ustinova 2009; Bjerck 2012; Mlekuž 2011; 2012). An alternative way of viewing this same phenomenon, however, is to consider that the dark silent world of caves offers a unique opportunity to avail of heightened and intensified sensory experiences. As the normal everyday stimuli that assault the sensory organs are stripped away and sight becomes redundant, other senses come to the fore, particularly hearing and touch. Sensory experiences are amplified in the absence of competing, intrusive and distracting variables. In this way even the most mundane experiences are transformed. The smell of burning wood or decomposing debris is more pungent. Food eaten underground and in the dark tastes stronger. Caves offer an intense

awareness of sensory experiences, something human beings are generally not accustomed to. Individuals may feel more sensuous or sensual. Hence the effect that caves have on the human senses is at once both oppressive and overwhelming. In the words of Tolan-Smith and Bonsall: 'There are few ways of feeling more human than to find oneself in a deep cave when the lights go out (1997, 218)'.



Figure 1.4 Squeezing through the entrance of Knocknarea Cave K, Co. Sligo. Human bones representing one child and one or two adults of Neolithic date were discovered in the cave (Photo Marion Dowd)

A consequence of the lack of sensory stimuli in caves is that it can induce altered states of consciousness (Lewis-Williams 2002; Ustinova 2009; Mlekuž 2012). Clottes (2003, 26) has gone as far as to suggest that 'caves are hallucinogenic places'. Such experiences can be achieved through sensory deprivation, prolonged social isolation, intense pain, vigorous dancing, insistent rhythmic sound such as chanting, or the consumption of hallucinogenic substances (Clottes and Lewis-Williams 1998, 14). Caves are therefore highly powerful, even dangerous places, in the landscape where individuals might have visions, hallucinations or out-of-body experiences (Mlekuž 2012, 205).

The silence of deep caves 'is almost painfully oppressive to ears accustomed to the constant and varied sounds of life in the world above' (Moore 1894, 3). Perhaps to compensate for this, auditory hallucinations are sometimes experienced deep underground (Clottes 2004). Several cavers have told me of hearing human voices or strange sounds when inside caves for long periods of time. During a BBC Radio 4 recording in Portcoon Cave, Co. Antrim, photographer Andy McInroy (2009) commented on how the team 'were stopped in our tracks by the strangest noises ... it sounded like a chatter of children's voices'. In the past, natural or imagined sounds may have been perceived as voices from the spirit world. This might explain the prophetic qualities associated with, for example, Greek oracular cave cults (Ustinova 2009). Silence in caves can also be deliberately manipulated to distort, accentuate or amplify sounds, chanting, music, singing and rhythmic dancing. This feature was recognised and exploited during the Upper Palaeolithic. Resonant chambers and passages in French caves are more likely to contain art than non-resonant areas (Bahn 1997; Sieveking 1997; Lewis-Williams 2002; Clottes 2003).

Smell can signify an intense form of intimacy with a person, object or place (Pink 2009, 145). Caves contain and amplify odours and some underground activities may have been strongly associated with particular olfactory experiences. Indeed, certain odours may have been an intrinsic aspect of certain ritual activities in caves. The smells contained underground range from the nauseating odour of decomposing animal carcasses or human corpses to the dankness of damp earth, the pungency of animal faeces, and the musty smell of dens. Odours have the potential to evoke memories and feelings which, within caves and particularly if trips involved communing with the spirit world or visiting the remains of the dead, may have been quite potent and powerful. In Neolithic Ireland there is evidence that caves were used for communal burial and excarnation with corpses laid unprotected on cave floors (Dowd 2008). People visiting caves during the months or years that it took for a cadaver to decompose

would have been confronted by strong odours and, to our mind at least, disturbing imagery. At other times, some of the smells contained within caves related to domesticity. Caves that were inhabited during the Early Medieval period, for instance, would have been filled with the smells of food preparation, cooking, smoking hearths and craft activities.

Caves heavily influence bodily posture and movement. Moving through a subterranean landscape is almost always slow and deliberate. Each step requires concentration and care unless one is intimately familiar with a site. A great deal of physical interaction takes place between the human body and the body of the cave. It may be necessary to lean against cave walls, hold onto boulders, crawl through low passages, squeeze through narrow openings, wade through water, crouch under overhangs, and twist to navigate awkward areas. People often feel the urge to leave their mark on the cave environment in the form of paintings, carvings, finger-flutings and graffiti. Simultaneously, the cave leaves its mark on the human body. People can emerge from the underground bloodied and bruised. More serious accidents and fatalities are a real possibility in what can often be a hostile environment. Clothing is muddled and torn. For prehistoric people this 'marking' of the body and clothing – physical and visible evidence of subterranean sojourns – may have been potent, particularly for those who never ventured beyond cave entrances.

People throughout the world have been profoundly aware of the potential of caves to transform an individual emotionally, mentally, spiritually and socially. This transformative aspect is most apparent and symbolic when an individual emerges from a cave into the outside world. This can be a profound experience. Colours, sounds and smells are never more vivid, vibrant or intense as the body adjusts to a sensory overload following the sensory deprivation of the deep cave environment. If and when people spent long periods immersed in darkness, such as the ritual practitioners who operated in the deepest parts of caves in Late Bronze Age Ireland, emerging into daylight may have been akin to a symbolic rebirth or rejuvenation (Figure 1.5). This was a physical and symbolic departure from the sacred spirit world and a return to the world of the living. Leaving the darkness, calmness and silence of a cave can also generate strong emotions ranging from relief to distress to grief.

THE OTHERWORLD, RESTRICTED ACCESS AND LIMINALITY

Sensory deprivation is one of the key features contributing to the concept of caves as places of the 'other'. The pioneer of British cave archaeology, William Boyd Dawkins, neatly summed it up as follows:

To past societies ... the subterranean landscape was an extraordinary place ... the gloom of their recesses, and the shrill drip of water from the roof, or the roar of the subterranean water-falls echoing through the passages, and the white bosses of stalagmite looming like statues through the darkness, offer ample materials for the use of a vivid imagination. The fact that often their length was unknown, naturally led to the inference that they were passages into another world (1874, 3).

Subterranean landscapes contrast in every way with the landscapes of the living that exist overground (Figure 1.6). The notion that caves are locations of the Otherworld is found in different parts of the world and amongst different societies (Stone 1997, 2012; Brady and Ashmore 1999; Clottes and Lewis-Williams 1998; Lewis-Williams 2002; Clottes 2012). Caves were where the dead, the ancestors and spirit beings resided. Caves allowed people to communicate with the spirit world and to receive otherworldly knowledge or enlightenment.

The perception that caves were part of the Otherworld explains why they were often avoided. Many African and Australian Aboriginal communities stay away from caves because they are spiritually dangerous places (Clottes 2012, 16). Similarly, Irish mythology and folklore represents caves as places of the supernatural that are best avoided. Many of the caves used for funerary activities in prehistoric Ireland are small and narrow. Rituals at these sites must have been relatively secret and private affairs, even if larger numbers of people congregated outside. Other rituals focused on cave entrances. In these instances it may not have been appropriate to enter sacred space. While caves may have been accessible in a physical sense, cultural and religious sanctions may have dictated who could enter caves and when. Access may have been restricted to certain times of the year or day, or to individuals of a particular age, sex or social status. Not everyone was necessarily qualified to navigate the subterranean world and engage with the spirits therein.



Figure 1.5 Cave as passage: a cave on Knockmore Mountain, Co. Fermanagh (Photo Marion Dowd)

If access was generally restricted or discouraged, then caves became ideal places in which to conduct private or secret activities such as initiation. The Roman geographer Pomponius Mela noted that druidic teaching of noble males in Iron Age Europe took place ‘in sequestered and remote places during twenty years, whether in a cave or in secluded groves’ (Green 1997, 48). Amongst the Kogi people of the Sierra Nevada de Santa Marta in Columbia, elders and spiritual leaders are educated from infancy in dark places such as caves. The chosen infants and children are not allowed into the light for 18 years until their education is complete. Contact with the outside world is kept to a minimum so that the mind is attuned to the spirit world without distraction (Ereira 2009). That caves are suitable places for spiritual training is evoked in the Sanskrit word for cave – *guhā* – which signifies ‘reared in a secret place’ from the dhatu *guh*, ‘to cover, conceal, hide, keep secret’ (Monier-Williams 1899, 360–1). In Tzinacapan, Mexico, traditional healers have their own special caves where they go to analyse problems. Dreams will reveal to the healers the day and time that they should go to a cave with offerings (Heyden 2005, 26–7). It is not possible to say whether caves in Ireland were used for initiation or as shamanic retreats, but ethnographic evidence suggest this is entirely possible.



Figure 1.6 Ballynamintra Cave, Co. Waterford was used for excarnation during the Neolithic and Early Bronze Age (Photo Thorsten Kahlert)

The liminal phase of rites of passage – the actual transformation – is usually associated with a liminal place and a separation from the rest of society (Van Gennep 1909; Turner 1977). Caves are physical and symbolic embodiments of liminality, places that mark the transition from light to dark (Barnatt and Edmonds 2002; Skeates 1991; 2010; Tomkins 2012). Caves are often located in isolated and marginal parts of the landscape, on the edge or outside of everyday life. Irish caves used for Neolithic mortuary rituals appear generally to have been located some distance from settlements (Dowd 2008). Similarly, in the English Peak District caves associated with prehistoric burial and ritual involved a separation or movement away from day-to-day life, habitation sites, and the community in general (Barnatt and Edmonds 2002, 120). Likewise, the cave-holy well complexes that were used in recent centuries as part of popular religious practices in Ireland were often located not only on off-shore islands, but on the coastlines of these islands. The pilgrimages – which were liminal practices in the context of formal Catholic doctrine – emphasised the liminal by journeying to remote boundary places in the landscape quite a distance from settlements and every-day life. More broadly, the activities that took place inside caves were also frequently liminal in nature. The use of caves for excarnation meant that fleshed corpses underwent a gradual transition into a collection of dry bones. The

liminal environment of the cave facilitated the movement from this world into the afterlife.

ANCIENT SYMBOLS IN A MODERN WORLD

The symbolic significance of caves and the various meanings they embody is evident from even a cursory glance at modern popular culture. To be ignorant, simplistic, barbaric or uncivilised is to be a ‘caveman’ – a derogatory term in many European languages (Bergsvik and Skeates 2012b, 8; Moyes 2012b, 3–5). An English 19th century illustration represented the perceived primitive nature of a group of Irish women by portraying them with simian features, smoking pipes and occupying a cave (Figure 1.7). Such images, an aspect of political propaganda of that time, sought to portray the Irish as uncivilised and inferior to their English neighbours thereby justifying colonial occupation.

That caves are homes or sanctuaries which nourish and sustain is another common thread. Caves are places that can contain vast treasures with examples ranging from Enid Blyton’s *The Famous Five* to the film *Pirates of the Caribbean: Curse of the Black Pearl* (2003). Of course treasure can be a metaphor for the strength and growth gained by overcoming personal challenges, as in the oft-quoted maxim attributed to Joseph Campbell: *The cave you fear to enter holds the treasure you seek*. Caves can represent the concept of counter-culture and anti-establishment, as indicated in the punk song *Going Underground* by The Jam.

The transformative potential of caves is neatly symbolised by the transition of Bruce Wayne and Dick Grayson into superheroes Batman and Robin after their descent into the Batcave. George Lucas’ *Indiana Jones* reveals the adventure and mystery attached to caves. That dangerous supernatural creatures lurk in the subterranean depths is another prominent theme, featuring in media as diverse as the children’s cartoon series *Scooby Doo* to horror films *The Descent* (2005) and *The Cave* (2005).

The isolated nature of caves and their dark silent interiors are often used as metaphors for loneliness and aloneness, depression and grief. Poet Paul Durcan described the recurring cave theme in his collection *Cries of an Irish Caveman* (2001) as follows: ‘The cave thing comes from the Aboriginal caves in Australia ... when I got back to Ireland, I felt, my life? ... The kind of rejection I’m talking about is like a death ... I spent the winter writing hundreds of those cries. I began to feel I was living the life of a caveman, though much less sophisticated than an Aboriginal one ... You get up, sit in front of the TV, mightn’t have a conversation for weeks on end’ (*The Tribune* 21/10/2001).



Figure 1.7 Women in a coastal cave, Co. Kerry, in 1842: 'it was only under promise of a glass of whisky apiece that their modesty could be so far overcome as to permit them to sit for their portraits' (Thackeray 1911, 27–8)

As openings into the earth, as passages inwards, caves are often seen as symbols of the vagina and representations of sexuality, sex, eroticism, fecundity, fertility, mother, birth, nurturing, safety or regeneration (Figure 1.8). In these readings the cave entrance is the vulva leading through the vaginal passage into the deepest internal space, the womb. The morphology of caves easily lends itself to such a conceptualisation. Everything about caves is private and internal; they have no outsides, only insides. Important things happen in this interior world such as conception (e.g. of ideas), nurturing (e.g. refuge from the outside world), transformation (e.g. transcending normal states of consciousness), and birthing (e.g. emerging with new wisdom). The cave as womb of the earth is a recurring theme, as in the work of poet Nuala Ní Dhomhnaill: *a Chú Chulainn / gur chaithis do chéad trí ráithe i bpluais / ar snámhán in uiscí do mháthar* (Cú Chulainn / who spent your first nine months in a cave / swimming in your mother's fluid) (Ní Dhomhnaill with Hartnett 2000). By contrast, in early Jewish-Christian literature the word for cave was used euphemistically to denote the vulva, but in this instance the term carried negative connotations (Taylor 1993, 160-1). One reading of the cave as represented in a series of paintings by Gwen O'Dowd titled *Uaimh* (Cave) (Figure 1.8) is that 'perhaps it is a vulva, and we have just been born' (Bourke 1997). Another critic saw in these same paintings that the caves 'are at once inviting and forbidding, reflecting both the lure and the threat of the unknown ... offering the promise of warmth and protection ... It is difficult, however, to ignore the overall sense of unease and foreboding ... their air of edgy menace' (Mac Giolla Léith 1997).



Figure 1.8 'Uaimh 31' by Gwen O'Dowd (mixed media on canvas/1998)

METAPHORS IN THE PAST

The diverse array of metaphors attributed to caves in modern popular culture suggests that caves presented an equally diverse range of symbolic meanings to people at different times in the past. Certainly Irish mythology and folktales spanning more than a millennium reflect all of the above themes: caves as places of the feminine, as home to

supernatural beings and creatures, as dangerous locations, as places of hidden treasure, as refuges of outlaws and criminals, as transformative spaces, and places of origin. However, does the archaeological record reflect any of these themes?

A theme that recurs in academic literature is the perception of caves as places of the feminine, womb of the earth and places of origin (e.g. Löffler 1983, 117; Whitehouse 1992, 180; Pugh 2005, 50; Dowd 2009, 89; Gradoli and Meaden 2012). Caves are holding spaces that facilitate and contain experiences while also nurturing growth. This may have been fundamental to the use of caves as places of spiritual retreat or places in which to achieve altered states of consciousness. The shaman or initiate emerged as a new person: s/he was reborn. If cyclical concepts of life and death were pertinent, caves may have represented birth and death, womb and tomb. People were born from a human cave; at death they returned into the womb of the earth. The sexualisation of caves means that they may also have been places where sexual activities of ritual significance took place. For instance, in Mesoamerica caves were often associated with eroticism as expressed in cave paintings of people engaging in sex or copulating with animals (Moyes 2005, 190).

Origin tales from around the world speak of caves as places that birth a particular ethnic group or hero (e.g. Bailey 1997, 65; Brady and Ashmore 1999, 127). In Ireland a Medieval myth relates that the high-king of Tara, Cormac Mac Airt, was reared by a wolf in the Kesh Caves, Co. Sligo (Dowd 2013b). Caves can also be the place of origin for materials that have economic, social or symbolic value – though extraction processes may well be imbued with ritual behaviour (see Dye 2008; Barrier and Byrd 2008; Blankenship 2008; Pritchard 2008; Franklin 2008). The clay found in caves is often tenacious with a high degree of plasticity and is very suitable for pottery production. Some modern Irish potters deliberately source their raw material from caves (Laurence Dunne pers. comm.), and this may also have occurred in prehistory. Past populations may have seen a close connection between caves and copper mining or limestone quarrying: both activities lead to the creation of artificial caves. A stalactite bead from Kilgreany Cave, Co. Waterford and a perforated straw stalactite from Cloghermore Cave, Co. Kerry further reveal the occasional importance of materials that originate from caves. Though small, these two beads may have transmitted powerful messages.

Though Irish mythology and folklore depict caves as places of the feminine, there are almost no examples in the surviving archaeological material from any chronological period of activities in caves that were restricted to people of a particular age or biological sex. That is not to say, however, that restrictions did not exist. In other parts of the

world access to caves was sometimes governed by age and sex. Gypsum mining in North American caves, an economic activity with attendant rituals, seems to have been restricted to adult males. These men may have been viewed as 'exceptional individuals' because of their physical and spiritual ability to navigate deep underground (Barrier and Byrd 2008). Where biological sex is identifiable in assemblages of human bones from Irish caves, there is generally no indication that funerary rites from any period were reserved for those of a particular age or sex (Fibiger forthcoming). Annagh Cave is the exception. Here the remains of three crouched burials and disarticulated remains of a further two individuals of Neolithic date were recovered accompanied by pottery, lithics and a perforated antler tine. At least three of the individuals were adult males who had died at an advanced age and several bones displayed evidence of interpersonal violence. This cavern, therefore, seems to have been reserved for the interment of elderly men, possibly warriors (Ó Donnabháin 2011). In terms of age bias, the assemblages of human bones from caves display a relatively low representation of juveniles (Dowd, Fibiger and Lynch 2006). However, it would be wrong to infer that caves were exclusively adult spaces. Many activities involving children may leave no discernible trace. At any period in time children may have lived, sought shelter, or played in caves. In French Palaeolithic caves such as Fontanet, Le Tuc-d'Audoubert and Niaux, hand and foot prints of children and infants have led to the suggestion of educational incursions into the underworld where young members of the community were involved in shamanic ceremonies (Clottes and Lewis-Williams 1998, 98–9; Stapert 2007; Clottes 2012, 20).

DIVERSE BIOGRAPHIES

This book explores cave use chronologically covering a period of 10,000 years. What soon becomes apparent is the recurrence of certain sites, reflecting the multi-period activities. Certain caves have been used time and time again, sometimes for the same purpose and sometimes for entirely different purposes. Reuse of the same cave over long periods may indicate continuity in traditions and the transference of knowledge and rituals from generation to generation. In other instances it is likely that caves were discovered, used, forgotten, then rediscovered, reused and forgotten once again. These two scenarios can be seen respectively in the archaeological assemblages from Killuragh Cave, Co. Limerick and Kilgreany Cave, Co. Waterford. From the Early Mesolithic through to the Late Bronze Age, prehistoric people visited Killuragh Cave to deposit offerings of disarticulated human and animal bone as well as artefacts. Kilgreany Cave was used for a wider variety of practices including Neolithic interment, the

placement of Bronze Age cremations, Late Bronze Age votive deposition, Early Medieval occupation and Medieval refuge (Dowd 2002).

The fact that caves contain palimpsests of activities spanning long periods of time is part of their allure, but also leads to problems disentangling increasingly complex and disturbed stratigraphic sequences. Cave archaeologists cannot afford to be period specialists: equal attention must be paid to all the material recovered from an excavation, regardless of date. This does not conform to most archaeological research and researchers as the discipline tends to be structured by chronological periods. Natural places such as caves, bogs, lakes and rivers, however, defy traditional archaeological classification systems and require a more holistic approach.

NAMED PLACES

We need only look at the names of townlands, villages and towns to see the extent to which the subterranean world has permeated Irish society. A variety of different words exist in the Irish language (many more than in English) to denote cave: *úam*, *úag*, *uath*, *uain*, *brothlach*, *cúas*, *cúasán*, *cuipe*, *derc*, *díderc*, *fíthec*, *fochla*, *fúachais*, *garad*, *lusc*, *lug*, *lurga*, *pluais*, *poll*, *polltalamh*, *pruchlais*, *sloc*, *slugaire* and *scailp* (Joyce 1910; Coleman 1965; Toner *et al.* 2007). These elements are incorporated into hundreds of placenames in reference to both real and imaginary caves. A random selection includes:

- Polltalloon (*Poll talúin*, cave/hole in the ground), Co. Galway
- Aghadark (*Achad an dearc*, field of the cavern), Co. Leitrim
- Cooslughoga (*Cuas na locha*, the cave of mice), Co. Mayo
- Cloyne (*Cluain uatha*, the meadow of the caves), Co. Cork, and
- Drumnahoe (*Druim na huamha*, the ridge of the cave), Co. Antrim.



Figure 1.9 Road sign for Ovens village: na hUamhanna – the caves (Photo Mark O'Donohoe)

The village of Ovens, Co. Cork is an anglicisation of *uamhanna*, the caves (Figure 1.9). Navan, the principal town in Co. Meath, is an anglicisation of *uaimh*, the cave.

Placenames that end in 'oo' or 'oe' (an anglicisation of *uaimh*) usually refer to a cave. Thus, Gortnahoo in Co. Tipperary derives from *Gort na hUaimh*, the field of the cave, and Glenahoo in Co. Kerry is an anglicisation of *Gleann na hUaimh*, the glen of the cave (Joyce 1910). Of the various placename elements, *poll* occurs with most frequency. It usually denotes a vertical swallowhole but can also signify a hole, pit or a deep pool in a lake or river. Sixteen caves in Ireland are called Pollnagollum, an anglicisation of *Poll na gColm* – the cave/hole of the doves/pigeons (Coleman 1965, 81).

In parts of the country where Irish continues to be the spoken language and where there is a stronger survival of rural traditions and folklore, the importance of caves is abundantly clear. Robinson's (1990; 2009) detailed mapping of the islands of *Inis Mór*, *Inis Meáin* and *Inis Oírr* off the west coast reveals the cultural significance of caves for farming and fishing communities. The majority of the 27 caves scattered across these three islands have individual names – some relating to supernatural events, others to historic usage, and others still to a particular landowner. For instance, *Uamhain Ghrióra* (St. Gregory's Cave) on the coast of *Inis Meáin* is named after St. Gregory who reputedly used it as a retreat. Local folklore claims that he gnawed off his lower lip in anguish because of sins committed (or

because he was hungry), but a golden lip grew back in its place (Robinson 1990, 22). A piper disappeared into a cave known as *An Poll Dubh* (the Black Hole) but his music continues to be heard occasionally aboveground. A cave on *Inis Mór* was named *Poll an Tobac* (Cave of the Tobacco) after it was used to conceal a consignment of tobacco that had washed ashore from a wrecked vessel. Sand and seaweed were gathered from a cave on *Inis Mór* known as *Scailp Mhikey* (Mikey's Cave) (*ibid.*, 98, 179, 203). The naming of caves on these islands and the associated folklore serve to physically anchor memories as well as historical and mythical events.

McConkey's (2012) study of caves on Rathlin Island, Co. Antrim again highlights the cultural significance of caves in rural farming and fishing communities. The 30 caves scattered around the island's coast were important and repeated foci of activities: these were active and recognised places in the landscape. Many of the caves were used for storing fishing equipment and some provided short-term shelter for fishermen from the mainland. At least seven of the caves have walls constructed across the entrances, probably related to fishing activities. The caves regularly feature in local folklore. One cave is said to have sheltered Robert the Bruce in the early 14th century, another was used to conceal a German spy during World War II. Some caves are associated with smuggling, others with massacres and political events, and some with Christian saints. The Rathlin caves were also named. Examples include *Uamha na gColmán* (Cave of the pigeons), *Uamha na Leac* (Cave of the flagstones), and Bracken's Cave (named after St. Bracken).

It is reasonable to infer that at any time in the prehistoric and historic past, caves formed an active part of peoples' understanding, interpretation and use of landscape. We can only imagine what names caves were known by to prehistoric populations, and how these names may have changed with time to reflect different cultures, different functions and different belief systems.

CAVE ACTIVITIES IN THE 21ST CENTURY

The vast majority of the Irish population have never been inside a non-commercial cave. Few people are comfortable venturing underground and fewer still enjoy the experience. It is a very rare person indeed who is more at home in caves, more at ease in that environment, than anywhere else. Show caves now provide the primary opportunity for people to engage with the subterranean. They play an important role in education, awareness, conservation and local rural economies, but it is important to recognise that the modern visitor experience is markedly different to that of the past. Individual experience has been replaced by group experience. Silence has been

replaced by chatter. Darkness and flickering flames have been replaced by constant subdued lighting.

Ireland currently has six show caves. Four are private businesses – Doolin Cave (*Poll an Iondáin*), Co. Clare; Aillwee Cave, Co. Clare; Crag Cave, Co. Kerry; and Mitchelstown Cave, Co. Tipperary. Two are government enterprises – Dunmore Cave, Co. Kilkenny and Marble Arch Cave, Co. Fermanagh. Mitchelstown Cave has offered guided tours since 1833 while Doolin Cave only opened in 2006. Show caves are popular attractions. Between 1983 and 2010 Crag Cave had 1.5 million visitors (www.cragcave.com). In 2010 Mitchelstown Cave received 10,000 visitors, while 17,500 people travelled through Doolin Cave (John English and Helen Browne respectively pers. comm.). The range of activities that take place in show caves has expanded. Concerts are regularly held in Mitchelstown Cave taking advantage of its special acoustic properties. In 2011 a Cork Opera House production entitled *The Cave* received an audience of 200 people. Some of the musicians performed in the dark. In 2009 a formal renewal of marriage vows took place in Doolin Cave. Santa Claus meets children in the depths of Aillwee Cave and Crag Cave every winter, handing out presents and standing for photographs; proof that supernatural beings continue to inhabit caves.

The development of caving as a sport is yet another modern and novel use of caves. Increasing numbers of people now engage with caves from the perspective of exploration, fun and as a serious – sometimes extreme – sport. Cavers leave physical traces of their expeditions underground in the form of bolting, ladders, scaffolding, flashbulbs, batteries and occasional litter. They also physically modify the subterranean landscape by leaving graffiti on cave walls, digging out deposits and breaking rocks. This is cave archaeology of the future.

Other caves have been reinvented – some would say revived – as places of New Age or Neo-pagan spiritual activities. Sheenaun Cave, Co. Sligo has become a place to meditate and seek spiritual guidance. This sometimes involves playing music inside the cave (Thorsten Kahlert pers. comm.). Ritual practices at the Kesh Caves, Co. Sligo and the Cave of Crúachain, Co. Roscommon centre on the concept that they are locations of the feminine, either resident to female supernatural beings/energy/goddesses, or symbolic of femaleness, fecundity, sexuality, the womb or birth. The modern rituals at these and other caves are personal and private, and so information is limited. However, I know that ‘women’s initiation rites’ have taken place at the Kesh Caves and that they have been visited on more than one occasion by groups of female witches or wiccans (one such trip took place in 2008). The words ‘*2000. No more violation of wombs*’ was

painted on a large boulder at the entrance to one of the Kesh Caves but has since washed off.

The Cave of Crúachain has been a focal point for Neo-pagan rituals since at least the 1990s, particularly at Samhain (eve of 1st of November) when the boundary between this world and the Otherworld can be traversed. In 2011 I interviewed an artist who lives near the cave and who has an interest in and awareness of Neopagan activities in the area. This artist provided valuable insights into how the Cave of Crúachain is used and perceived at present. Several people have described the cave to him as being a 'busy' place in terms of energies and spirits; others have sensed malevolency. Couples have had sexual intercourse in the cave specifically to dedicate the resultant energy to the site. Others have left their blood in the cave, either menstrual or by purposefully cutting themselves. People have variously described the Cave of Crúachain to my informant as an empowering place; a place for conquering fears; somewhere to test or challenge oneself; a site of initiation; an in-between place; a residence of the goddess of death (the Morrígan); an entrance to the Otherworld; and a space to connect with one's ancestors. Men have occasionally said that they felt afraid to enter the cave. In other instances men made a quick exit because they were uncomfortable in what they perceived to be a place of the feminine. Some men thought it was 'not right' for them to be there. Many of these modern perceptions are undoubtedly heavily influenced by the Medieval mythology which links the cave to a series of omnipotent supernatural women and represents it as a passage into the Otherworld.



Figure 1.10 Material culture related to Neo-pagan activities at the Cave of Crúachain, Co. Roscommon and Cave E, Kesh, Co. Sligo (Photos Marion Dowd and P. J. O'Neill respectively)

Modern New Age and Neo-pagan rituals often result in the accumulation of material culture (of relevance to archaeologists of the future, perhaps). In 2011 a series of objects were placed in and around the entrance to Cave E at Kesh, Co. Sligo. These included clay statuettes and copies of Venus figurines, as well as seashells that had been wedged into small crevices and fixed in place with clay (Figure 1.10). These had been removed from the site within a year. In 2001 two bunches of wild flowers and grasses were placed by a tree at the entrance to the Cave of Crúachain. Inside, a cache of objects had been deposited in a natural crevice in the cave wall including coins, a clump of long blond human hair that had been twisted and knotted, several quartz pebbles, water-worn pebbles, birds' feathers, a bird's egg, beads and flowers or grasses. A St. Brigid's Cross woven from rushes was found on the cave floor nearby. At the end of the passage

two severed wings of a large white bird had been deliberately positioned to mimic the outstretched wings of a bird in flight. A small bowl had been placed beside the dismembered wings, its contents disintegrated (Figure 1.10). The artist I spoke to in 2011 told me of other objects that have been left inside the Cave of Crúachain and an adjacent cave: a plait of human hair, pieces of gold, and a comb.

What the various modern activities tell us – be it concerts, caving trips, Neopagan rituals, or meeting Santa – is that caves continue to occupy an important place in our world and continue to attract attention. As has always been the case, people engage with caves in a variety of different ways. Some of the modern usages may be entirely new ways of interacting with caves. Other usages echo the types of activities that took place in the distant past. There can be little doubt, however, that caves in the Irish landscape are constantly being reinvented and reinterpreted. They mean different things to different people: this must always have been the case.

THE ARCHAEOLOGY OF CAVES IN IRELAND IN CONTEXT

Recent decades have seen a growth in research and publications devoted to European cave archaeology ranging from thematic to regional to site-specific and chronological studies. Two of the most important publications to my mind are *Romano-British Cavemen: Cave Use in Roman Britain* by Branigan and Dearne (1992) and *Underground Religion: Cult and Culture in Prehistoric Italy* by Ruth Whitehouse (1992). Both provided valuable methodological and theoretical templates for subsequent approaches to the archaeology of caves. Generally, period-specific studies tend to dominate research agendas where the role of caves during a particular chronological period is analysed (e.g. Whitehouse 1992; Oosterbeek 1997; Brady and Prufer 2005; Prufer and Brady 2005; Dowd 2008; Bryant 2011; Bergsvik and Storvik 2012; Manem 2012). There is also a growing body of literature pertaining to multi-period studies of caves in particular regions or countries (e.g. Burov 1997; Skeates 1997; 2012a; Tolan-Smith 2001; Pasda 2004; Bonsall *et al.* 2012). Two of the most important books – *The human use of caves* (Bonsall and Tolan-Smith 1997) and *Caves in Context* (Bergsvik and Skeates 2012a) – have brought together diverse papers united by the fact that they represent the current state of research in European cave archaeology at particular points in time. More broadly, *Sacred Darkness* (Moyes 2012a) is a thematic study of the ritual use of caves from different parts of the world spanning the Palaeolithic to the present and includes much that is relevant to Europe. Exciting research is also gradually emerging which explores the sensory, psychological and physical ways caves are experienced by human beings (e.g. Whitehouse 1992; 2001; Clottes 2003; Lewis-

Williams 2002; Ustinova 2009; Skeates 2010; Mlekuž 2011; 2012; Bjerck 2012).

Considered within a broader European context, this book on Irish cave archaeology is quite unique. It is the only detailed study that I am aware of which explores cave use spanning the entire duration of human occupation of any country, examines all the known sites, and assesses the various activities that took place within caves. This is primarily an archaeological text based on detailed artefact analysis, field survey and excavation. However, I have also drawn on related disciplines such as history, folklore, popular religion and early Irish literature. These sources provide valuable insights into how caves were perceived in the past, offering perspectives that have no equivalent archaeological signature. There are undoubtedly shortcomings in my understanding and use of material from disciplines outside of archaeology, but the objective was to achieve as comprehensive an understanding as possible of the rich cultural significance of caves.

I have created here, for the first time, an accurate and comprehensive list of caves of archaeological significance in Ireland (see Appendix 1). This list has been shared with the National Monuments Service in the Republic of Ireland and the Northern Ireland Environment Agency, Built Heritage, to update their respective records (www.archaeology.ie and www.nismr.ie). Previously I had noticed that many caves of archaeological significance were not known to the relevant statutory bodies, that the locations of sites were sometimes incorrectly marked on archaeological maps and registers, and that on-line information was often outdated and inaccurate (particularly for Northern Ireland). There were also numerous instances of caves classified as archaeological sites when in fact there was no supporting evidence to warrant such a designation. At the time of writing, therefore, the information available in the statutory archaeological registers for the Republic and Northern Ireland should tie in with the sites discussed here.

This book is the culmination of almost 20 years researching, excavating and surveying caves. It began life as postgraduate research (Dowd 1997; 2004). During my university studies I had considered focusing only on Neolithic and Bronze Age cave use. As noted above, however, caves are unapologetically multiperiod in nature. Focusing on specific chronological periods and ignoring material of other dates is limiting. I chose to adopt a more holistic approach as this allows for a greater appreciation of the complexity of individual sites, as well as illustrating the richness of the cumulative archaeological and historical data. A *long durée* approach also allows overall patterns and changes in cave use to emerge. For instance, we now know that in

Ireland, Neolithic and Bronze Age populations used caves primarily for ritual purposes, Iron Age people seemingly had little engagement with caves, Early Medieval communities carried out a multitude of activities in caves, while Medieval and post-Medieval societies largely avoided the subterranean. This broad perspective may not have been possible if a series of period-specific studies were undertaken by a series of period-specific archaeologists. Multi-period and multi-disciplinary approaches are never without fault. Nevertheless, broad narratives such as that presented here are often lacking in current archaeological scholarship, though they are extremely valuable.

It is not possible to discuss in any detail the relationship between caves and contemporaneous sites aboveground because of the broad geographical and temporal remit of the book. However, future site-specific, region-specific and period-specific cave studies will allow more scope for a closer analysis of how activities underground were integrated into wider social, cultural, mental and physical landscapes. Another way of looking at this, of course, is that for too long archaeologists have concentrated on what was going on aboveground to the neglect of what was happening underground.

BOOK STRUCTURE AND GENERAL NOTES

The first three chapters of this book provide an overview and context for the seven period-specific chapters that follow. Chapter 2 examines the history of cave investigation in Ireland. Until quite recently cave excavations have been largely non-archaeological in nature resulting in significant ramifications for archaeological analysis. Chapter 3 provides an outline of cave formation and details the current state of research in Irish cave archaeology. The remainder of the book is chronologically ordered with chapters devoted to the Mesolithic (Chapter 4), the Neolithic (Chapter 5), the Bronze Age (Chapter 6), the Iron Age (Chapter 7), the Early Medieval period (Chapter 8), the Medieval period (Chapter 9) and the post-Medieval to modern periods (Chapter 10).

The *current* generally accepted date ranges for the relevant archaeological periods in Ireland are indicated after each chapter heading in the knowledge that these are artificial modern constructs that are open to change. In recent years, for instance, the dates of the Irish Mesolithic have been pushed back (Bayliss and Woodman 2009), the beginning of the Neolithic has been brought forward (Cooney *et al.* 2011), and entire papers have been devoted to the span of the post-Medieval period (McNeill 2007). In Irish archaeology, prehistoric periods have traditionally been referenced in upper case and, until recently, so too historic periods. The latter generally now appear in lower case but, for the sake of consistency, in this book all periods are

presented in upper case (thus, Early Medieval rather than early medieval).

Ireland: throughout this book, 'Ireland' refers to the island of Ireland and incorporates both the Republic of Ireland and Northern Ireland unless otherwise specified.

Cave names: the cave names used in this book are those by which a site is most commonly known in existing literature and amongst local communities, cavers and scholars. In some cases a cave was renamed by antiquarians or cavers and this later name, if it has become the more common, is the one adopted here. For instance, Bull Paddock Cave at Edenvale was rechristened Alice and Gwendoline Cave in 1902 in honour of the two Stacpoole sisters who lived in Edenvale House, and the cave has appeared as such in all subsequent literature. One exception is the Cave of Crúachain, Co. Roscommon. Since the 19th century it has been known as *Oweynagat*. However, this is an antiquarian appellation and the older name for the cave, which appears in Early Medieval and Medieval manuscripts, is the *Cave of Crúachain*. The latter is what I have chosen to use throughout this book. In cases where a cave did not already have an assigned name, I have called it by the townland in which it is located, thus Ballynacourty Cave is located in Ballynacourty townland, Co. Waterford. The origins of cave names are varied and an explanation of the history behind each name is beyond the scope of this book (see Coleman 1965, 81).

Irish terminology: in cases where there is no exact or suitable English translation, I have retained Irish words; after the first usage an approximate translation is given. Irish terminology is also retained for personal names and placenames where this is the most common form by which they are generally known at present (e.g. in *Gaeltacht* regions where Irish continues to be the primary spoken language). In cases where an anglicised personal name or placename is now more common, that is the one which appears here.

Radiocarbon dates: radiocarbon dates have been calibrated using OxCal v4.2.3 and IntCal13 calibration curve (Bronk Ramsey and Lee 2013; Reimer *et al.* 2013). Previously published dates are referenced accordingly. Previously unpublished dates that are reproduced here with the permission of colleagues are referenced in the form of 'pers. comm.' All other dates were obtained by me as part of various research projects and are published here for the first time. These dates are referenced simply as 'M. Dowd'. All the human bones listed in the tables of radiocarbon dates (except those from modern excavations) were analysed by Dr. Linda Fibiger in 2005 as part of the *Human Remains from Irish Caves Project*. Age and sex are

recorded where these could be established. In cases where a particular sex seemed likely, but not certain, this is presented in the format of '(possibly male)'.

Isotope values: some of the isotope values provided in the various tables are AMS measured ^{13}C values which can have a large uncertainty factor, and thus it is not advisable to use these values for dietary interpretations.

Burial cave: several recent volumes dedicated to cave archaeology (e.g. Bergsvik and Skeates 2012a; Moyes 2012a) use the term 'burial cave' to describe a cave in which human bones have been found. This is overly simplistic and masks a wider range of cultural and natural processes that can result in the deposition of human bones underground. In this book, 'burial' refers only to the formal and deliberate interment of a fleshed articulated corpse.

Chapter 2

Excursions Into Places of Fearful Darkness – 300 Years Investigating Caves

Caves were feared and avoided in much of Western Europe prior to the 18th and 19th centuries; speleology and cave exploration only became commonplace during the 20th century (Barnatt and Edmonds 2002, 126; Clottes 2003, 12). In Ireland, the reluctance to venture underground usually stemmed from an expectation of encountering the supernatural. On a boat trip along Bantry Bay, Co. Cork in 1833, Daniel Grose commented on a local man who was known to visit coastal caves to kill seals. This, he held, was unusual in the context of the ‘vulgar superstitious ideas’ of locals and fishermen who maintained that the caves were inhabited by spirits. Grose (1833, 390) added: ‘so fully does this most ridiculous notion prevail, that it is with much difficulty a boat’s crew can be procured bold enough to venture under the arch, and when they do, it is with fear and trembling, thinking they will never get out alive, or escape some horrid punishment, as the reward for their temerity’. William Stackpoole Westropp observed the deterrent effect of another such trip to caves in the Burren in 1870: ‘several foolhardy individuals attempted to explore them, after having fortified their nerves with liberal allowances of whiskey; under the influence of the potent spirit they beheld, while in the caves, divers strange sights and visions, the description of which has quite deterred the natives from following their example’ (Coleman 1965, 32). Trepidation about entering caves continued until relatively recently: in the 1950s a Bristol caving expedition to Leitrim noted that local people did not go into caves as they were afraid of disturbing the fairies (Lloyd 1956). However, with the development of antiquarian investigation an interest in exploring caves gradually emerged which began to shed light on what had been a realm of the supernatural.

The 17th century witnessed the inception of antiquarian enquiry and the emergence of Anglo-Irish and English interest in the natural sciences (Waddell 2005, 41–53). The gentry – mainly gentlemen – began visiting caves as part of leisurely or scholarly outings. The earliest recorded trip to an Irish cave was a candle-lit venture by a teenage George Berkeley and his school friends to Dunmore Cave, Co. Kilkenny in 1699 (Figure 2.1). Berkeley, a native of Kilkenny, later became Bishop of Cloyne and a renowned philosopher. He is considered the father of third level education in the United States – hence the University of California, Berkeley. Berkeley penned three different accounts of his expedition to Dunmore Cave, one of which appeared in his *Philosophical Commentaries* of 1708, generally called the *Commonplace Book*. The teenagers came upon quantities of human bones in the cave but Berkeley remained unconvinced by the explanation of a local guide that they represented the remains of people who had been devoured by a carnivorous beast (Fraser 1901, 80). Berkeley conceded that the ‘dismal solitude, the fearful darkness, and vast silence of that stupendous cavern have left lasting impressions in my memory’ (*ibid.*, 79). Other commentators agree that the experience had a ‘far-reaching effect on [his] young genius’ (Luce 1931, 159).

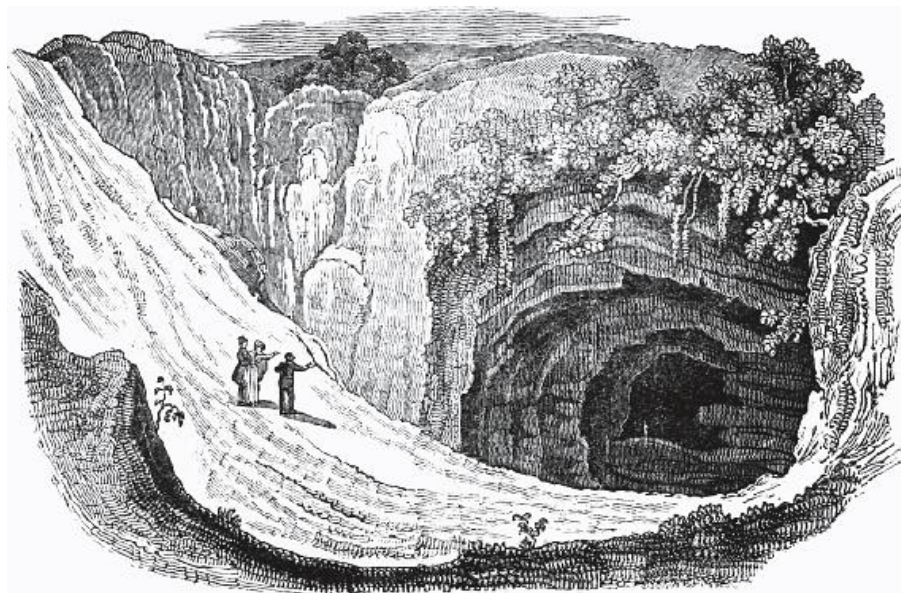


Figure 2.1 A party visiting Dunmore Cave, Co. Kilkenny, in 1832 (Dublin Penny Journal 1832)

In 1709 Thomas Molyneux commented on the ‘dreadfull Romantick

(sic) appearance' of Dunmore Cave (Praeger 1918, 149). A description of a visit there by William Rufus Chetwood (1748, 110–2) *circa* 1745 conveys something of the awe and mystery with which caves were held:

the mouth of this natural rarity is distinguished by a monstrous flight of different species of birds, whole numbers darken the air as you come near the mouth, and their different voices seemed to tell us we were going to view something extraordinary ... When you enter the mouth, a sudden chillness seizes all parts of the body, and a dimness surrounded our lights as if the place was filled with a thick fog ... Our faces, through this gloom, looked as if we were a collection of ghosts, and the light in our hands seemed as if we were making a visit to the infernal shades ... When we came out, we thought we had abandoned the regions of the dead, to draw the air of paradise.

Geological specimens were removed from the site by Chetwood and the abundant occurrence of human bones was noted. He also visited Ovens Cave in Co. Cork (*ibid.*). Bones were removed from Dunmore Cave by physicist Adam Walker in 1771; he compared being in the cave to being 'in the mouth of a huge wild beast, with ten thousand teeth above his head, and as many under his feet' (Walker 1773/4).

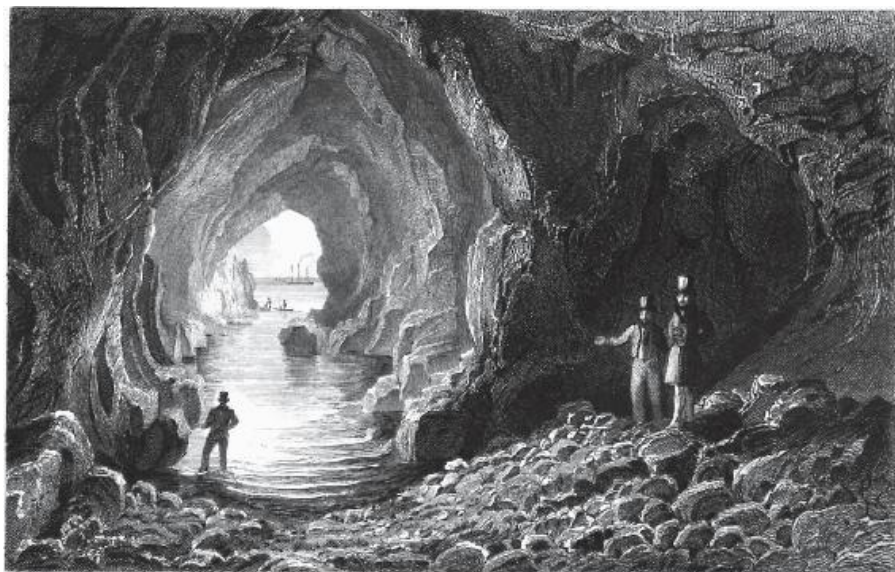
In the west of the country, Charles Lucas visited the Cave of the Wild Horses, Co. Clare, in 1736 and recorded a local belief that a herd of supernatural horses emerged from the cave each year (Ó Dálaigh 1998, 101). In 1753 Charles O'Connor referred to Rathcroghan, Co. Roscommon as 'famous for its great cave and druidic rites' – alluding here to the Cave of Crúachain (Waddell *et al.* 2009, 34). On visiting the site by candlelight in 1779, Gabriel Beranger described the souterrain constructed against the cave entrance as 'being masonry said to be done by the druids, who performed here some of their secret rites' (Wilde 1870/1, 247).

The effect the underground had on Berkeley and his contemporaries alludes to the general manner by which caves were perceived in the 18th century. Even for the gentry and antiquarians there was something Otherworldly about these places. Early excursions would have left little or no archaeological trace, except perhaps for casual losses such as coins or the remains of picnics. Antiquarian visits might therefore explain the presence of a halfpenny of Charles II in Portbraddan East Cave, Co. Antrim (May 1934, 58); a coin of James II in Alice and Gwendoline Cave, Co. Clare (Scharff *et al.* 1906, 69); a George III shilling in Killavullen Cave 2, Co. Cork (Riley unpublished); and a silver *demifranc* of Charles X in Connaberry Cave C, Co. Cork (Gwynn *et al.* 1942, 390). Clay pipe fragments have also been found in Glencurran Cave, Co. Clare and Kilgreany Cave, Co. Waterford (Movius 1935, 280–1). Sherds of chinaware and glassware, clay pipe fragments and butchered animal bones from the outer chamber of

Dunmore Cave may represent the debris of picnics enjoyed by visiting parties (Dowd 2007a).

THE GREAT AGE OF TRAVEL WRITING

The period 1775 to 1850 – described as the ‘great age’ in Irish travel writing – witnessed an increase in tourism to Ireland during which time travel narratives became extremely popular (Kroeg 2004, 126). Travel was a pastime enjoyed by wealthy gentlemen of leisure. Many early narratives refer briefly to caves as features of interest. The Marble Arch Caves, Co. Fermanagh featured on the itinerary of French *émigré* Chevalier de Latocnaye on his trip to Ireland in the 1790s (Coleman 1965, 49). Travel writer Arthur Young visited Mitchelstown Old Cave, Co. Tipperary *circa* 1777. He described descending the entrance opening by ladder and journeying through the cave by candlelight. He was impressed by the beauty of the site and the ‘very beautiful incrustations of spar, some of which glitters so much that it seems powdered with diamonds’ (Young 1780, 151). Not all visitors were so fortunate. During an excursion to Dunmore Cave in the late 1820s, a company of English army officers got lost and were obliged to spend 24 hours underground (Praeger 1918, 152). Evidence of early trips sometimes survives in the form of graffiti. A French viscount visiting Glendalough, Co. Wicklow in the 1840s climbed the cliff face to St. Kevin’s Bed and etched his name on the cave wall beside that of poet Walter Scott who had been there in 1825 (Arlincourt 1844, 187).



*Figure 2.2 Nineteenth century visitors to Portcoon Cave, Co. Antrim
(Wright et al. 1831)*

A particular diversion of excursions to caves during the 1830s and 1840s was to experience the echoes created by discharging a gun (Wright *et al.* 1831, 69). A pistol fired inside a sea cave near the Giant's Causeway in the 1830s had hoped 'to entertain visitors with the singular and astounding effect of its impulses on an atmosphere pent up in the bowels of the earth' (Colton 1835, 76). The danger of this sport became apparent when a six-pounder was discharged in another cave along the Antrim coast causing the cave roof to collapse inwards. Luckily, no one was injured (Willis *et al.* 1842, 47). In some cases pistols were replaced by musical instruments. At Portcoon Cave, Co. Antrim 'the notes of a bugle ... produced delicious echoes' (Figure 2.2) (King 1860, 185). Recreational tourism to caves was well underway.

A lengthy illustrated report devoted to the experiences of different visitors to Mitchelstown New Cave, Co. Tipperary appeared in the magazine the *Dublin Penny Journal* in 1834, a year after the site had been discovered. The feature included a ground plan and section drawings of the cave, remarkably detailed and accurate for the time (Figure 2.3) (Nichol 1834, 207). One explorer had spent eight hours underground and was one of 40 people who had visited the cave that particular day. Visitors left their horses and carriages at an adjacent cottage where they changed into appropriate clothing. The tenant who rented the land in which the cave was located earned money by acting as a guide. Mitchelstown New Cave quickly developed into a commercial show cave. The entrance was gated to prevent 'the intrusion of mischievous people' who sought to avoid paying the fee and who posed a threat to the stalagmite formations (*ibid.*, 203). Fifty years later, Reverend Canon Courtenay Moore (1894, 2) advised on the necessary clothing and equipment required for visiting the site: 'It is well to provide yourself with some overalls before entering, such as a sou-wester, and an old macintosh, besides bringing a supply of candles, matches, magnesium wire, tow and turpentine'. He went on to expound the recreational value: 'You have plenty of mud and loose stone; plenty of crouching, creeping, and crawling; plenty of places and spots where you can break your shins and knock your head, all of which of course adds immensely to the interest of the visit – once it is over!' (*ibid.*, 2). That same year an excursion by wagonette to Mitchelstown New Cave formed part of the itinerary of the Dublin, Cork and Limerick Naturalists' Field Clubs. After lunch the cave was visited by candlelight (Anon. 1894, 182–3).

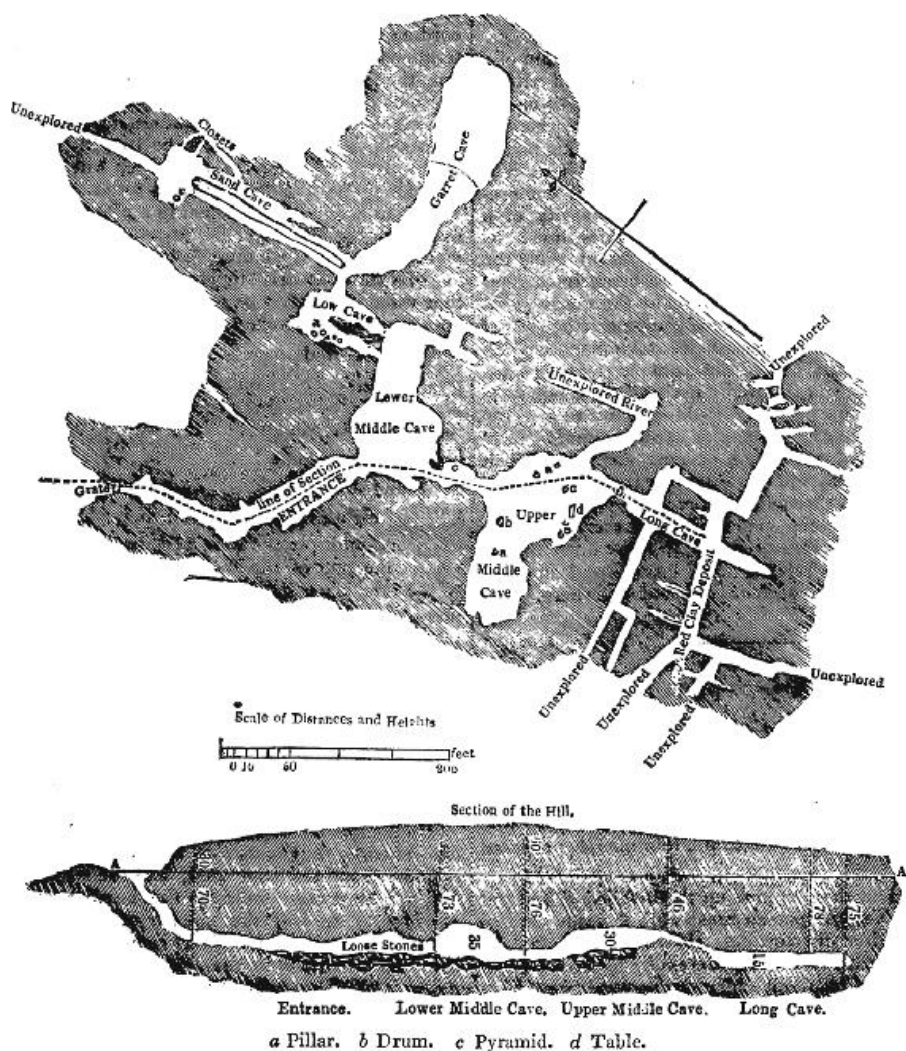


Figure 2.3 Plan and profile of Mitchelstown New Cave, Co. Tipperary, in 1834 (Nichol 1834)

EARLY ANTIQUARIAN INVESTIGATIONS

An ambition of the Physico-Historical Society, established in 1744, was to collect and publish information on the topography and natural history of Ireland (Fraher 1997). The society granted ten guineas to medical doctor Charles Smith towards collecting data on the natural history of counties Waterford, Kerry and Cork (Smith 1746; 1756; 1774). Smith documented several caves that were known at the time including Shandon Cave, Co. Waterford and Cloyne Cave, Co. Cork. The latter, he maintained, must have 'sheltered the first wild inhabitants of the town itself' as it ran beneath the village (Maberly 1910, 44). *Topographia Hibernica* (Seward 1795) also recorded several

caves of note while *A Topographical Dictionary of Ireland* (Lewis 1837) listed sites such as Ovens Cave, Co. Cork and caves at Cong, Co. Mayo. The *Geological Survey Memoirs*, compiled between the 1860s and the 1880s, strove to record brief details of caves.

Pioneer cave excavations took place in Antrim in the 1830s and 1840s, propelled by geological rather than archaeological enquiry. In 1834 geologists James Bryce and John Scouler carried out excavations in three coastal caves at Ballintoy resulting in the recovery of animal bones (Bryce 1834). At about the same time, chemist Thomas Andrews conducted investigations in two other caves along the Antrim coast in addition to four caves on Rathlin Island, one of which produced an iron object that was described as resembling a sword hilt (Andrews 1834, 660). Both campaigns of excavation received support from the British Association for the Advancement of Science. Yet another Antrim cave, in the Red Bay – Cushendall area, was investigated following the unexpected discovery of human skeletons and prehistoric axes near the cave entrance during quarrying (Lloyd 1847/50).

Similar projects were taking place in the south of the country. In 1854 an excavation was carried out in Dunmore Cave by J. G. Robertson together with Reverend James Graves and John G. A. Prim of the *Kilkenny Archaeological Society*. The aim of the investigation was to address specific geological questions, but in the process a significant quantity of human bone was discovered (Robertson 1854, 174–5). Graves returned to the cave with Arthur Wynne Foot and Peter Burtchaell in 1869, and carried out excavations noting that ‘the osseous remains of men, women and children, which, though not now strewn the cave in the same profusion they formerly did, may be procured in quantities by disturbing the surface of the floor in a particular place’. They undertook chemical and mineral analyses of the bones recovered – the first documented scientific examination of bones from an Irish cave (Foot 1870/1, 67). Casual explorations also resulted in the removal of human remains from Dunmore Cave (and probably many other sites). Foot noted that human skulls and skull fragments were occasionally removed from the site and kept as curiosities and souvenirs (*ibid.*, 77). In 1874 Edward T. Hardman (1875/7; 1881) of the Geological Survey carried out investigations in two areas of Dunmore Cave which again resulted in the recovery of an assemblage of human bones.

THE SEARCH FOR BONE CAVES

The 1870s and 1880s witnessed important developments in cave investigation driven by the objective of recovering evidence of extinct fauna. With this in mind, Thomas Plunkett carried out limited

explorations at seven caves around Knockmore Mountain, Co. Fermanagh *circa* 1873. After the initial investigations proved promising, Plunkett, together with Reverend Dr. Samuel Haughton, ‘procured all the labourers ... in the neighbourhood, together with all the buckets, crowbars, picks, spades and shovels that were available; and with this little army of sturdy mountaineers we commenced “cave-hunting” in earnest’ (Plunkett 1876, 134). Their work led to the establishment of the *Committee Appointed for the Purpose of Exploring the Fermanagh Caves* which received support from the British Association for the Advancement of Science. The committee included notable polymaths of the day such as Andrew Leith Adams, Edward T. Hardman and anatomist Alexander Macalister – all of whom were interested in caves primarily from a geological and palaeontological perspective. Plunkett directed excavations in 15 caves at Knockmore between 1873 and 1878. Deposits in one of the caves were dug to a depth of over 6m which involved blasting through three stalagmite floors with dynamite (Plunkett 1877, 76). Only six caves were fully excavated as it was believed that none would produce remains of extinct fauna (Plunkett 1878). Some 20 years later, however, Plunkett was rewarded with the discovery of a bear skull in another cave in the area (1898, 570). In 1875 he also excavated an important Bronze Age cremation burial in Knockninny Cave, Co. Fermanagh (Figure 2.4). In this instance his excavation and recording techniques were quite advanced for the time and care was taken to document the strata encountered and the spatial distribution of artefacts and bones within the cave (Plunkett 1870/9; 1875/7).

Developments were also gathering pace in the south-east of the island encouraged by the discovery of a mammoth tibia in Shandon Cave, Co. Waterford in 1859 during limestone quarrying. The tibia was paraded through Dungarvan town by the quarrymen believing it to be the thigh bone of an ‘antediluvian giant’ (Brenan and Carte 1859). A large number of the bones from Shandon Cave were destroyed and used in road construction or to make ‘bone dust’ (Adams 1876, 192). Local postmaster and amateur antiquarian Edward Brenan investigated the cave and procured one of the first collections of Irish extinct faunal remains which included bear, reindeer and mammoth. Scientific excavations followed in 1870 and 1875 directed by A. Leith Adams and Robert Harkness with the retrieval of further Pleistocene remains (*ibid.*; Woodman *et al.* 1997). Shandon Cave was destroyed by quarrying but the animal bones survive in the Natural History Museum, Dublin.



Figure 2.4 William Wakeman's drawing of the Bronze Age burial in Knockninny Cave, Co. Fermanagh (Plunkett 1870/9)

Despite the important discoveries at Shandon, cave investigation was not as advanced as the state of research in Britain. The 1875 anniversary address of the Royal Geological Society expressed dissatisfaction with the pace of cave research in Ireland describing it as backward and underdeveloped. Cave excavation was encouraged

with the incentive that it was likely to repay scholars with the recovery of extinct faunal remains (Hull 1875, 49). Shandon Cave had pinpointed a potentially rich region on which to focus explorations: the Dungarvan valley, ‘a resort of the huge mammalian that characterised the Post Pleiocene epoch’ (Adams *et al.* 1881, 177). Ballynamintra Cave – just under 10km from Shandon Cave – was targeted for investigation in 1879 by A. Leith Adams, George Henry Kinahan and Richard J. Ussher (*ibid.*). Brown bear, reindeer and red deer bones of Pleistocene date were recovered in addition to human remains of Neolithic date, a polished stone axe, an amber bead and Early Medieval artefacts. Stratification was recorded and the vertical and horizontal findspots of artefacts were noted. Detailed plans and sections of the cave were drawn. The unpublished field diaries and published report illustrate the use of meticulous recording and excavation techniques, further demonstrated by the recovery of very small artefacts and bones. The team also identified other caves in the Dungarvan valley they deemed worthy of investigation (*ibid.*, 180).

By now renowned for their work at ‘bone caves’, the Adams-Kinahan-Ussher team became core members of the *Committee for the Purpose of Exploring Caves in the South of Ireland* which was established and funded by the British Association circa 1880. William Boyd Dawkins, a leading figure in European cave investigation, was also involved. The primary objective was to excavate caves in the hope they would produce ‘hoards’ of extinct faunal remains (Ussher 1895, 92). Work took place in caves at Middleton and Carrigagour, Co. Cork, and at Carrigmurrish Cave, Co. Waterford (Ussher 1880; 1881a; 1881b; 1886). The continued palaeontological, and to a lesser extent geological, focus is apparent by where the excavation results were published. Excavation reports appeared in the *Geological Magazine*, *The Irish Naturalist*, *Reports of the British Association for the Advancement of Science*, *Transactions of the Royal Dublin Society* and the geological series of the *Proceedings of the Royal Irish Academy*. Nonetheless, when archaeological material was encountered it was collected and curated with the same diligence as palaeontological finds (Figure 2.5).

Several commentators continued to express disappointment at the pace of Irish cave research. Robert Francis Scharff (1895, 57) noted that a few caves ‘have been entered with a view to the discovery of bats, – others have been examined by archaeologists, but hardly any of them have been systematically worked’. He reiterated the earlier criticism that research here lagged so far behind what was happening in Britain, commending in particular the cave excavations of Boyd Dawkins. Scharff catalogued all caves known to him at that time – 23 sites, to which 12 further caves were added by his contemporaries (e.g. Ussher 1895; Scharff 1895; Coleman 1895). The surprisingly low

number of sites known to the scientific community reflects the extent to which Irish cave research was really in its infancy as the 19th century drew to a close.

About 1899 renowned Swiss zoologist Charles Immanuel Forsyth Major visited the Dublin Museum of Science and Art to examine the extinct faunal collections from Knockninny Cave, Shandon Cave and Ballynamintra Cave. His trip resulted in the formation of the *Committee appointed to explore Irish caves* in 1901, a group whose aim was ‘the further exploration of Irish cave deposits’ (Scharff *et al.* 1903a, 171). Funding was granted by the Royal Irish Academy and the British Association for the Advancement of Science. The founding members were leading scientists and polymaths of the time, mainly in the fields of natural history and geology, and included R. F. Scharff, R. J. Ussher, Robert Lloyd Praeger, archaeologist George Coffey, and Grenville Arthur James Cole. At this point only caves in Antrim, Fermanagh and Waterford had been explored thus attention was deliberately directed to other limestone-rich regions that had not been investigated. The Kesh Caves, Co. Sligo, a series of caves at Edenvale, Co. Clare (Figure 2.6), as well as Castlepook (Mammoth) Cave, Co. Cork became the subject of scientific investigations between 1901 and 1908 (Scharff *et al.* 1903b; 1906; 1918).

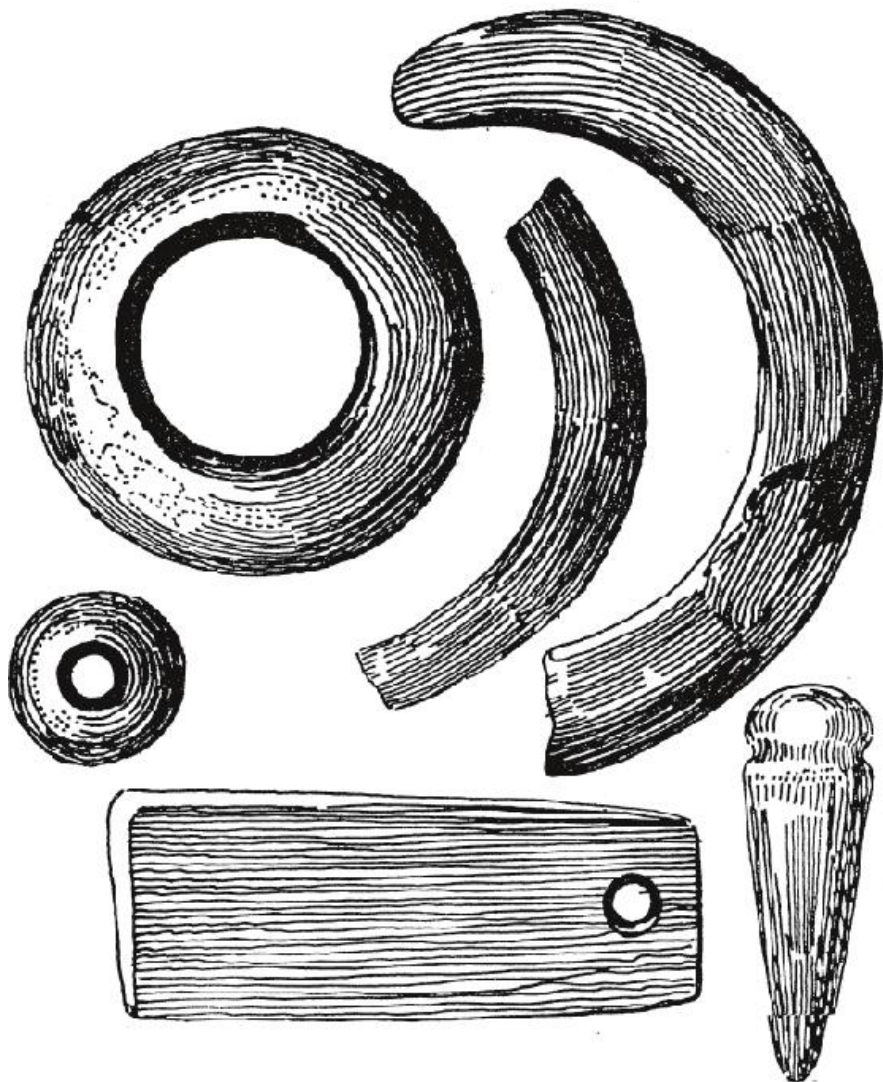


Figure 2.5 Archaeological finds made during the antiquarian excavation of Carrigmurrish Cave, Co. Waterford (Ussher 1886)

The late 19th century enthusiasm and interest in caves and their paleontological potential resulted in a series of papers related to cave excavation methodology, written principally by R. J. Ussher. In a short but important article published in *The Irish Naturalist* (Ussher 1895) he outlined the types of caves that would repay excavation: relatively small dry sites that would not have been well-visited and where stalagmite floors might be expected. In his estimation 'the lucky cave is one which having in past ages been open, and having become the resort of animals or primeval men, has received their remains as its

deposits were being formed' (*ibid.*, 93). He also commented on excavation strategy advising that 'the most careful records must be kept of the exact position of each object, for unless the sequence of events is recorded, the history of the cave is broken up like the mixed letters in a spelling game' (*ibid.*, 93). Ussher's commitment to cave exploration is evidenced by the topic he chose for his presidential address delivered before the Dublin Naturalists' Field Club in 1910: *Cavehunting*. Once again, he lamented the lack of intensive cave exploration in Ireland.

Ussher recognised that 'caves often prove to be perfect museums of the natural history and human antiquities of bygone ages' and 'a single cave, if fruitful in beds of deposits, may tell a very long tale' (Ussher 1906, 2). He illustrated the importance of excavating stratigraphically in terms of Ballynamintra Cave where three strata had been identified relating respectively to what he termed 'bear', 'elkhunters' and 'Neolithic men'. Ussher recommended that every cave excavation should include opening a trench at the cave mouth, marking the datum level on the cave walls, and drawing a section before removing a stratum. Regarding light he suggested that the 'worker should be provided with candles, which he can stick anywhere in the clay (lamps are unmanageable). He should have a hand-basket beside him in which to place the relics, and a small bottle in his pocket for the smaller objects ... all the objects ... should be placed in a separate bag, with a label indicating the stratum and their position in the cave. They should be allowed to dry, and carefully packed in boxes or covered baskets' (Ussher 1910, 43). He also advocated searching the excavated spoil outside a cave for small bones and artefacts: 'I found it an excellent plan to lay a couple of corn-sacks on the ground, like a carpet, and empty the barrow on these. When the clay or sand was searched the bags could be lifted, and the materials on them thrown out' (*ibid.*, 43).



Figure 2.6 Excavations at Alice and Gwendoline Cave, Co. Clare, circa 1903 by photographer Robert Welch. Unidentified lady (possibly Mrs. Stackpoole), Richard J. Ussher, and two unidentified labourers (reproduced by permission of the NMI)

The *Committee Appointed to Explore Irish Caves* was certainly rigorous in its approach to cave excavation methodology, though dynamite was occasionally used to blast through rock and floors (Scharff *et al.* 1906, 8, 17). At the Edenvale caves it was noted that ‘objects and implements found in every two feet of earth, from the mouth of the cave inward, were collected and transferred into a parcel or bag, which received a number. Thus when ... in connexion (*sic*) with the bones or other objects found, a number is mentioned, the latter refers to a particular bag ... so that it might afterwards be possible to determine the exact position which it originally occupied in the cave, both vertically and horizontally’ (*ibid.*, 2–3). For example, the unpublished excavation notebooks record that the grid 17ft to 20ft inside the entrance of Barntick Cave was excavated on the 26th July 1904. Most of the bones and artefacts recovered from that grid were inked with a specific site and grid code, in this instance CB9. Because the unpublished records and the excavated material have survived, this facilitates a modern analysis of the spatial distribution of material within the cave.

DIGGING IN THE BACK GARDEN

Side-by-side with scientific explorations, and largely influenced by

them, important excavations took place in Brothers' Cave and Oonaglour Cave, Co. Waterford between 1906 and 1913. The caves were discovered when brothers Gordon William and Francis Noel Forsayeth – inspired by a lecture on cave exploration delivered by their neighbour R. J. Ussher – squeezed through a narrow opening in the gardens of their home, Whitechurch House, in 1906. The cave they discovered was named Brothers' Cave in their honour (Forsayeth 1931; Dowd and Corlett 2002). The following day, accompanied by their father Lieutenant Colonel Richard William Forsayeth, a military surgeon who had served in India, Gordon found a Late Bronze Age metalwork hoard lying on the cave floor. Oonaglour Cave was subsequently discovered connected to Brothers' Cave via a tight passage. Thus began nine years of intermittent excavations directed by the colonel.

Forsayeth's excavations in the two caves located in his garden led to the recovery of significant quantities of faunal remains, over 500 human bones and at least 450 archaeological artefacts representing multi-period activities. His unpublished notebooks reveal something of the techniques employed. Excavations were large in scale involving the removal of great volumes of earth, though the colonel decided against the use of dynamite. Several local men worked on the project and Gordon helped out during school holidays. At Oonaglour a pulley mechanism involving scaffolding and a windlass was erected over the surface opening to haul up excavation spoil. A ladder provided access from the ground surface to the cave chamber beneath. Shutters were fixed across the entrance: 'Rain cannot now enter this chamber ... I intend to have glass windows put in, so that on wet days one can work inside with a good light' (Forsayeth unpublished, 07/02/1908). The wheelbarrow path through Brothers' Cave is still visible. By the time of Colonel Forsayeth's death in 1919, artefacts from Brothers' Cave and Oonaglour Cave plus those from his excavations in the nearby Carrigmurrough Cave, occupied two large rooms in Whitechurch House (Power 1928, 123). The colonel had meticulously recorded the artefacts and bones discovered in a series of ten diaries and had illustrated a selection of finds in two albums (Figure 2.7). The notebooks and the Brothers' Cave album survive and are invaluable as most of the archaeological material was destroyed or stolen when the house was taken by armed forces during the War of Independence (Dowd and Corlett 2002).

FORCED UNDERGROUND

The vast majority of those who sought to explore caves in the 19th and early 20th centuries were upper class, educated, English and Anglo-Irish gentlemen. Their perception of caves differed enormously

from that generally held by the Irish, primarily because the former did not share the popular folk beliefs of the latter. However, the great impoverishment and suffering experienced by the majority of the Irish population in the 19th century as a result of economic, social and political issues forced a change in the general interaction with caves. Caves now represented a means of financial gain whether through the procurement and sale of speleothems, or by working as a labourer on a scientific excavation, or acting as a guide to tourist groups. When William Tighe visited Dunmore Cave in 1802 and William Robertson went there in 1816, it appears that local guides were available to take visitors on tours (Foot 1870/1, 71; Robertson 1854). This would seem to make Dunmore Cave the oldest commercial show cave in the country. An account relating to the Mitchelstown Old Cave claimed that during the Great Famine (1845–1852) ‘peasants entered the cave and literally cut up the stalagmites and sawed off the stalactites in order to sell them to the local gentry so as to purchase food for their starving families’ (*Evening Echo* 14/03/1973). Between 1845 and 1865 the Cave of Crúachain, Co. Roscommon was ‘repeatedly explored’ by locals in the hope of discovering the treasure of the mythological Queen Medb which was said to be concealed there (Wilde 1870/1, 247). This can hardly have been for amusement considering that the recorded start date of the explorations coincided with the beginning of the Great Famine.

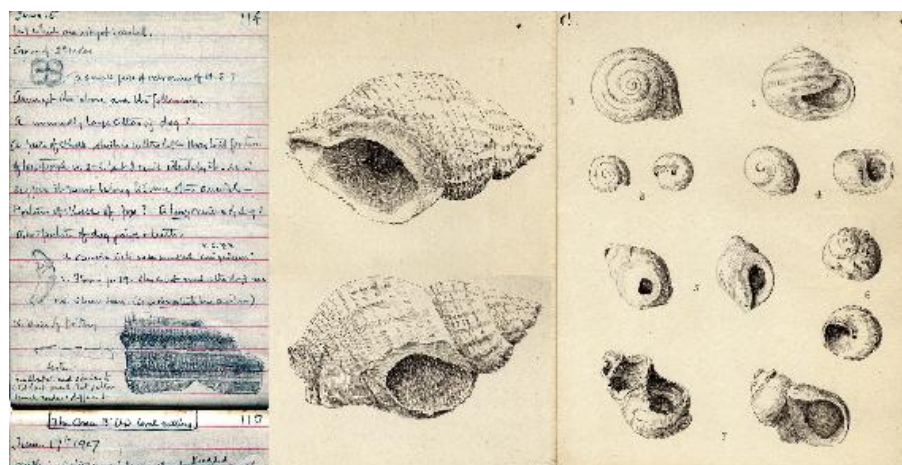


Figure 2.7 Extract from the unpublished diaries of Colonel R. W. Forsayeth relating to excavations at Oonaglour Cave, Co. Waterford, 15th June 1907, and his illustration of seashells from the adjacent Brothers' Cave (note no. 5 is artificially perforated) (reproduced by permission of the RSAI)

The demand for speleothems as collectibles by some of the gentry led to the destruction and removal of formations from many sites. On his tour around the south of Ireland in 1758, Pococke noted that a landowner had removed geological specimens from caves at Tralee, Co. Kerry for display in his house (Ó Maidín 1959, 49, 54). A late 18th century reference mentioned that the Earl of Wandesford had had a stalagmite pillar from Dunmore Cave 'sawn into a slab' to adorn his home (Walker 1773/4). Scientific cave exploration had raised awareness of certain sites but had also inadvertently attracted unwanted attention and vandalism. R. J. Ussher's early visit to Castlepook Cave, Co. Cork *circa* 1881 'attracted numerous undesirable visitors to the cave' who believed the scientists were searching for precious minerals. Thinking the stalactites were of monetary value, they 'broke them off by the hundreds'. A lockable door was subsequently erected across the entrance (Evans 1905, 20). Stalagmites were also destroyed at Carrigacrump Cave, Co. Cork (Evans 1909a, 146). In the same county, Gortmore Cave was gated but 'some roughs broke in ... and destroyed the unique collection of aenemolites' (Evans 1911a, 139). In 1906 Colonel Richard Forsayeth returned to Brothers' Cave, Co. Waterford to find 'the bottom of the chamber strewn with stones, thrown down by the vulgar herd who came to visit the cave, before the doors were put up, during my absence on Sundays' (Forsayeth unpublished, 12/09/1906). It seems that as the 19th century progressed, the trepidation experienced by many at the prospect of entering caves had diminished significantly.

THE QUEST FOR A PALAEOLITHIC

Very little cave excavation took place between 1910 and 1930, no doubt influenced by national and international warfare and political affairs. This was redressed by a series of influential developments in the mid 1930s. Though palaeontological concerns continued to be foremost on the agenda, a more archaeological focus was emerging. The Bristol Speleological Society had been involved in archaeological research in Britain since 1919, concentrating mainly on the caves of north Somerset and Bristol (ApSimon 1969, 31). In 1928 two members of the society (including Edgar K. Tratman) joined forces with three members of the Royal Irish Academy (Arthur M. Gywnn, Frederick T. Riley and Arthur Wilson Stelfox) to establish a research group aimed at obtaining Pleistocene faunal remains from caves (Tratman 1929, 109). Kilgreany Cave, Co. Waterford became the main target of investigation but trial trenches were also opened at adjacent sites including Brothers' Cave, Oonaglour Cave, Carrigmurrish Cave and Ballynamindra Cave. The team was led by Tratman, a dentist by profession and a respected British caver. At Kilgreany several burials

were discovered (Figure 2.8) including the crouched inhumation of an adult male which elicited great excitement – and controversy – as potentially the first evidence of Palaeolithic ‘man’ in Ireland (Tratman 1929, 120; Ó Ríordáin 1931, 362; Power 1931; Stelfox 1930; Movius 1935; Jackson 1936b). Hallam Movius, under the auspices of the *Third Harvard Archaeological Expedition to Ireland*, directed a second phase of excavations at Kilgreany in 1934 (Movius 1935). The objective was to retrieve further proof of Palaeolithic human activity, but upon discovering the broken nature of the stalagmite floor and extensive evidence of stratigraphic disturbance, Movius deduced that the 1928 burial was probably Neolithic in date, a fact later confirmed by radiocarbon dating (Molleson 1985/6, 2; Brindley and Lanting 1989/90, 2). Even though the early date was overturned, the 1928 expedition had succeeded in raising awareness of the potential of discovering the Irish Palaeolithic in caves. More importantly, perhaps, the debate served to bring caves to the attention of the archaeological community.

The RIA team who had joined Tratman at Kilgreany in 1928 progressed to investigate the Kesh Caves in 1929 with the aim of retrieving Pleistocene fauna, and in this regard they had some success but little of archaeological significance was discovered (Gwynn *et al.* 1940). The group also examined a series of caves at Killavullen, Co. Cork in 1934. The most significant find was a partial skeleton which appears to be of Neolithic date. The results were not published and the field records are largely missing, though some documents survive in the NMI. Between 1938 and 1940 Gwynn and Stelfox, together with Frank Mitchell, investigated three caves at Connaberry, Co. Cork (Gwynn *et al.* 1942). Human bones were recovered which have turned out to be Neolithic and Medieval in date, but artefacts were scarce.

The 1930s also witnessed a revival of interest in caves along the north Antrim coast. Andrew McL. May carried out excavations at Portbraddan Cave on an intermittent basis between 1935 and 1939 following initial trial trenching in 1931. Extensive Early Medieval strata were discovered along with the skeletal remains of three adult females. At the time these were described as displaying features indicative of ‘a late palaeolithic admixture’ and of ‘epi-palaeolithic inheritance’ (May 1943, 46); they are more likely to be of historic date but the bones cannot be located at present. A series of four caves and two rock shelters along an adjacent stretch of coastline at Ballintoy were also the subject of excavation by John Wilfrid Jackson of Manchester Museum during the 1930s. His objective was to develop the state of research regarding the prehistoric archaeology of Northern Ireland. All six sites produced archaeological material indicating intensive usage, particularly during the Early Medieval period

(Jackson 1933a; 1933b; 1934a; 1934b; 1936a; 1938).

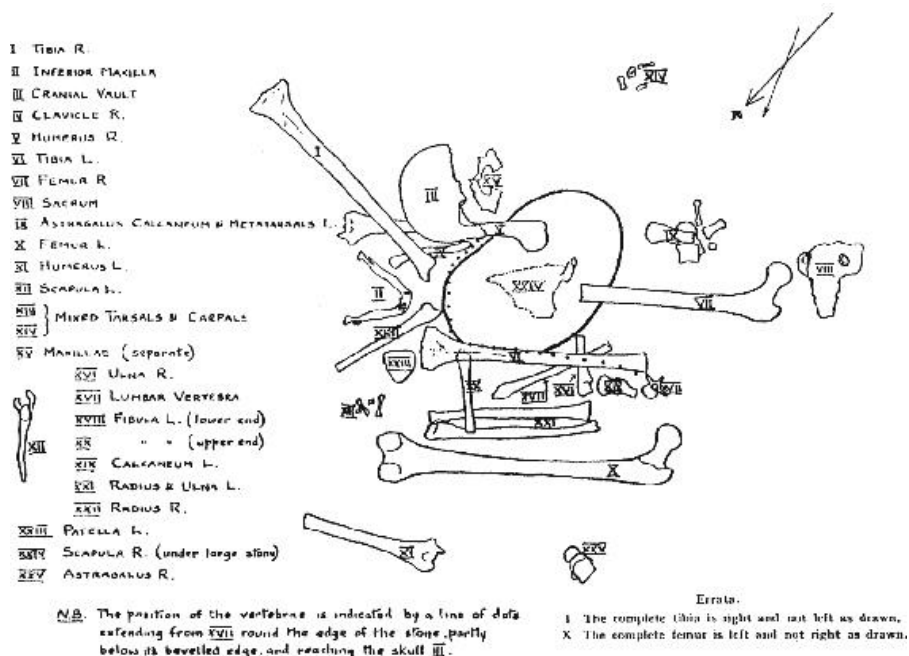


Figure 2.8 Crouched inhumation of an adult female (Kilgreany A) of Neolithic date, discovered in 1928 at Kilgreany Cave, Co. Waterford (Tratman 1929)

Over a period of 50 years, between 1940 and 1990, the archaeological investigation of Irish caves effectively ground to a halt with one notable exception. In 1973 David Drew and David Huddart, both of the Geography Department at Trinity College Dublin, conducted an important excavation in Dunmore Cave with the aim of addressing a series of geological and geomorphological questions. An incidental result of their investigation was the discovery of human skeletal remains representing 44 individuals and a range of Viking artefacts including silver coins and glass beads (Figure 2.9) (Drew and Huddart 1980). The artefacts provided the first archaeological link between Dunmore Cave and references in Medieval manuscripts to a Viking attack at the site. None of the human bones recovered in 1973 can be located at present.



Figure 2.9 Iron needle, glass beads and fragmented amber ring from 1973 excavation in Dunmore Cave (Photo NMI)

SPELEOLOGY: THE SCIENCE OF CAVES

Édouard-Alfred Martel (1859–1938)

Hand in hand with the growth of scientific enquiry into caves, the end of the 19th century witnessed the birth of modern speleology in Europe, largely as a result of the dedication of Parisian Édouard-Alfred Martel. During his lifetime Martel explored almost 1500 caves, hundreds of which had never been previously entered, typically seeking out the deepest chambers and passages. He recalled that local French women would ‘mumble between paternosters: *You may go down if you like, but you will surely never come back!*’ (Jackson 1982, 52). He argued that speleology should be considered a science – a division of physical geography – rather than simply a sport. His own research and publications covered cave geology, hydrology, meteorology, flora and fauna. He designed innovative caving overalls with a range of pockets to hold equipment as varied as flints and steel, thermometers and barometers, a compass, a first-aid kit, a portable battery-powered field telephone and even chocolate and rum! Though much of his work was in France, Martel explored hundreds of caves across Europe earning him an international reputation (*ibid.*, 52, 62).

In 1895, the same year he founded *Société de Spéléologie*, Martel visited Ireland to go caving in counties Galway, Fermanagh and Tipperary, collaborating closely with naturalist Henry Lyster Jameson. He travelled on a cart laden with equipment including a canvas boat which was used in the Marble Arch Caves, Co. Fermanagh. His visit resulted in the publication of *Irlande et Cavernes Anglaises* in 1897 (Jameson 1896, 96–7; Brindley 1990). Martel instilled great enthusiasm amongst scholars in Ireland and awakened interest in speleology as a recreational sport. Evans (1909b, 77), for instance, enthused that ‘not only is cave-hunting an interesting scientific pursuit, but it is a fascinating amusement, and one of the best forms of physical exercise’. At that time in Ireland, however, it seems that ‘Most people would regard cave exploring as a puerile pastime, indulged in by idle people, who regard neither cleanliness nor the cost of wearing apparel in their efforts to crawl through ugly holes beneath the surface of the earth’ (Evans 1911a, 141). For many more decades speleology remained a pursuit of the upper classes, for ‘tourists of the refined type’, not just in Ireland but across Europe (*ibid.*, 141).

John Christopher Coleman (1914–1971)

Caving as a sport began to develop in Ireland from the 1940s onwards and the person generally credited with popularising speleology is John Christopher Coleman – better known as Jack Coleman, and often referred to as the ‘father of Irish caving’ (Figure 2.10). Coleman began visiting caves in the late 1930s and 1940s, carefully documenting his visits, taking photographs and surveying sites (Figure 2.11). This culminated in his seminal work *The Caves of Ireland* (1965) which documented 378 caves across the island and was the first concerted study and catalogue of its kind. Though primarily aimed as a text for cavers, it included valuable information on the history of cave exploration as well as archaeology and folklore. Coleman published extensively on cave exploration and occasionally cave archaeology, particularly in the *Journal of the Cork Historical and Archaeological Society* as he lived in Cork (Dowd 2013c; 2013d). He established the *Speleological Society of Ireland* in 1964 and was the first editor of the society’s journal *Irish Speleology*. The society was reconstituted in 1983 as the *Speleological Union of Ireland*.

In the course of his career Coleman identified over 40 caves of archaeological and historical merit and, until now, *The Caves of Ireland* has provided the only published synthesis of Irish cave archaeology. His book remains the cornerstone for all research relating to caves, archaeological or otherwise. Coleman made some noteworthy observances with regard the types of sites that might be archaeologically significant. He isolated small caves as ‘good

archaeological excavation sites, for ancient man rarely penetrated deep into caverns' (Coleman 1965, 13). Recent research has confirmed this hypothesis (Dowd 1997; 2004). Again pre-empting any modern synthesis of the data, Coleman noted that people 'used caverns in sporadic fashion from Neolithic to Mediaeval times, and judging by the quantity of artefacts alone, it would appear that the Early Christian Period was the high tide mark of troglodyte occupation' (Coleman 1965, 70). Yet another insight he offered was that the overt palaeontological focus of previous research had led to a lack of study on the human use of caves (Coleman 1947, 63).

During his lifetime Coleman directed a series of important cave investigations, initially underscored by palaeontological objectives but latterly displaying an interest in archaeology. His excavations at Park North Cave, Co. Cork in 1942 led to the discovery of substantial Early Medieval strata. Only a small portion of the cave was excavated as it soon became evident that the objective 'to ascertain the presence or otherwise of Pleistocene fauna' would not be fulfilled (Coleman 1942, 63). In the mid 1940s Coleman carried out trial excavations at two other sites in Cork – Carrigtwohill Cave and Ballyfin Cave – leading to the recovery of animal bones (Coleman 1944; 1944/5a; 1945). During his explorations of Ovens Cave, Co. Cork and Dunmore Cave, Co. Kilkenny, animal and human bones were discovered (Coleman 1940; 1944/5b; 1966). Coleman also carried out excavations at Glencurran Cave, Co. Clare in the deeper parts of the system, beyond the area of archaeological significance, with the aim of pushing the extent of known cave passage (Dowd 2009, 87).



Figure 2.10 Cavers Mick Murphy (left) and Jack Coleman (right), Ovens Cave, Co. Cork, 28th October 1934 (Courtesy of the SUI)



Figure 2.11 Unidentified cavers in Donnellaroska's Cave, Co. Cork, 13th October 1940 (Courtesy of the SUI)

Another seminal work in terms of Irish caves was *The Caves of North-West Clare*, a catalogue compiled by the University of Bristol Speleological Society (UBSS) in 1969 and edited by Edgar Tratman. This compendium has since been extended and updated twice by the same society (Self 1980; Mullan 2003). The latest version is particularly important as it incorporates information on the archaeological and cultural significance of several sites. The UBSS website also currently hosts David Drew's database of caves in the Republic of Ireland (Drew 2009). Other regional studies of caves, though primarily aimed at the caving community, again contain useful information from an archaeological perspective including *The Caves of Co. Cork* (Oldham 1981) and *The Caves of Fermanagh and Cavan* (Jones *et al.* 1997).

FORTUITOUS DISCOVERIES: THE CONTRIBUTION OF THE CAVING COMMUNITY

Caving in Ireland has fluctuated in popularity over the past 50 years being particularly popular in the 1970s and 1980s, with a fall off in interest during the 1990s, but at present is once more on the increase. The status of the sport can be gauged by the number of student caving societies associated with universities and Institutes of Technology, as well as the growing number of regional caving clubs, and membership figures of the national caving body, the Speleological Union of Ireland (SUI). In 2011 the SUI had 160 members with a breakdown of 73% male and 27% female; almost two-thirds of members were between 15

and 34 years of age (Ó Ceallacháin 2011, 7). Despite the increased interest, the number of active cavers in Ireland is relatively low compared to Britain or other European countries. There are probably less than 100 active cavers resident in the country at present (Colin Bunce pers. comm.).

The caves that are most attractive to cavers – long, deep, extensive systems which often contain active rivers and streams – were not favoured for use in prehistoric and historic times and therefore are not usually of archaeological significance. Nonetheless, the majority of significant archaeological finds made in caves in recent decades can be credited to cavers. This is reflected by the fact that most such discoveries first appear in the pages of speleological journals and publications, such as *Irish Speleology* and *Descent*. Cavers play a pivotal role because they explore sites in remote locations, they visit inaccessible parts of caves, and sometimes inadvertently disturb archaeological strata when pushing caves (i.e. digging to extend the length of known cave passage). Essentially, cavers venture into territory that few archaeologists are comfortable or suitably trained to explore with confidence. The most important archaeological discoveries that can be attributed to cavers include those made in Robber's Den, Co. Clare; Pollthanacarra, Co. Fermanagh; Cloghermore Cave, Co. Kerry; Glencurran Cave Co. Clare; Sramore Cave, Co. Leitrim; Creevy Cave, Co. Monaghan; and Moneen Cave, Co. Clare.



Figure 2.12 Caver Terry Casserly squeezing into the chamber of Robber's Den, Co. Clare where the skeleton of a Late Bronze Age woman was found (Photo Colin Bunce)

British cavers first suggested the archaeological potential of Robber's Den (Figure 2.12) in 1935 and this was confirmed in 1963 when members of the Chelsea Speleological Society discovered human and animal bones during a small scale excavation in the cave (Pick and Bartlett 1936; Mantle 1963). In 1989 the Cork Speleological Group discovered a deeper chamber in Robber's Den that contained

the disturbed remains of an adult female; the remains were subsequently archaeologically excavated and dated to the Late Bronze Age (Anon. 1991; Cremin 1991; Anderson and McCarthy 1991). More recently, an Early Medieval comb fragment, an antler, oyster shells and animal bones have been found at the site by cavers (Danny Burke pers. comm.).

In the north of the country speleologists discovered human and animal bones at the base of Pollthanacarra swallowhole in 1972 which led to an excavation of the site by geologists from the Ulster Museum (Doughty 1995). The human remains represent four individuals, at least three of which are Early Bronze Age in date. In 1983 the Mid-West Caving Club reported large quantities of bones in Cloghermore Cave, and in 1998 cavers discovered human bones and an iron axe at the site thus prompting an archaeological excavation (Condell 1985; Connolly and Coyne 2000; Connolly, Coyne and Lynch 2005). Caver Brian Judd discovered a human mandible in Glencurran Cave in 1986 (Wilson 1986), a lead that was not followed up by archaeologists until 2002. Thereafter several seasons of archaeological excavations ensued which revealed that the cave had been a focus for ritual deposition in the Late Bronze Age and had been occupied in Early Medieval times (Dowd 2007b; 2009). At Sramore Cave human bones were uncovered by cavers while attempting to push a passage in 1995 (Top. files, NMI). The remains were subsequently radiocarbon dated to the Final Mesolithic which is significant as virtually no human bones from this period are known in Ireland (Dowd 2008).



Figure 2.13 Early Bronze Age antler hammerhead or macehead found by cavers in Moneen Cave, Co. Clare (Photo Thorsten Kahlert)

A caving trip through Creevy Cave in 2009 led to the identification

of a possible souterrain constructed against an opening into the cave (Kennedy and Kozłowski 2009). Slag, a hearth, charcoal and 18th century pottery were noted during a later archaeological inspection of the site (Dowd, Kennedy, Kozłowski and Moore 2011). In 2011, while attempting to access deeper levels of Moneen Cave, cavers unearthed an Early Bronze Age antler hammerhead (Figure 2.13) and Late Bronze Age pottery which led to an archaeological excavation of the site, the first in Ireland to involve a team of both cavers and archaeologists (Casserly and Dowd 2011; Dowd 2013a). Artificial constructions at other caves have also been regularly noted by cavers (Robin Sheen pers. comm.), most of which comprise Early Medieval souterrains or walls constructed in more recent centuries.

It remains the case that future archaeological discoveries in Irish caves will continue to be made primarily by cavers, not archaeologists. It is incumbent upon the archaeological profession to actively work on strengthening the good relationship that currently exists between archaeologists and cavers, thereby ensuring that archaeological discoveries in caves are swiftly reported to the relevant authorities while also educating the speleological community on the archaeological dimension of caves and best practice in terms of preservation and conservation. Archaeological excavations in caves benefit from the on-site expertise of cavers and thus excavating teams should, where possible, include cavers – akin to the relationship that exists between archaeologists and divers in the case of underwater archaeological investigations.

THE LEGACY OF **300** YEARS OF EXPLORATIONS

The history of cave research in Ireland is as interesting and varied as the history of cave usage. Many bones and artefacts that had reposed in caves for thousands of years entered a new phase in their life histories after they had been discovered in the 18th and 19th centuries. They embarked on long and complex journeys passing through various hands, travelling between antiquarians, being moved between institutions, and sometimes leaving the island for the first time to end up in private collections abroad or radiocarbon dating laboratories. Some assemblages were carefully washed, labelled and stored; other collections were sadly neglected. Many bones and artefacts were lost, others destroyed, while others still were carefully curated as heirlooms or for their perceived supernatural properties. As a result of this chequered history, every few years records or part of an antiquarian collection re-surface, having been rediscovered in a museum or private collection, in the stores of a university or library, or in an attic or basement. In this way Irish cave archaeology is always evolving and developing even when no new excavations take

place.

It is timely that the archaeological significance of caves in Ireland is more fully recognised while also appreciating that the surviving record is beset by a number of significant issues and problems, many of which are a consequence of the nature of past investigations and will be discussed in the next chapter. Though the majority of early cave excavations reached high standards for their time, it remains that much information has been lost either because the primary data has been dispersed or destroyed or because investigations lacked the rigorous methodological approaches and scientific techniques employed nowadays. The loss of original field notes, skeletal material and artefact assemblages is in some cases enormous. Almost no material or data survive for any cave investigations carried out prior to 1850. Finds and records from several later excavations have also disappeared or only partially survived. This means that the interpretation of activities at particular sites and elucidating overall patterns in cave use is seriously hampered. Notwithstanding, it is important that we address the surviving archaeological assemblages from caves and endeavour to draw some inferences and interpretations as to how these natural places in the landscape were used through time. What follows in the remainder of this book is an attempt to achieve this objective.

Chapter 3

Caves and Cave Archaeology in Ireland

The vast majority of caves in Ireland occur in carboniferous limestone, a karst topography, which accounts for approximately 50% of the underlying geology of the island. Limestone is dominant in the centre and north of the country but is largely absent from much of the southwest, southeast, northeast and extreme west (Figure 3.1). Despite the significant limestone component of the country's geological make-up, caves do not occur in all limestone regions as large tracts are concealed beneath other rock formations, sediments, blanket bog and raised bog. Generally, caves tend to be more abundant in upland areas where deposits overlying karst are not substantial (Drew 2009, 7). From the outset, therefore, there are marked regional clusters in the distribution of caves across Ireland and this has implications for the archaeological record: people in the past could only choose to use a cave if one was actually present in a particular landscape.

CAVE FORMATION

The geological or speleological classification of a cave is any natural underground cavity in rock that is formed by the solvent and erosive action of surface water as it slowly travels downwards through joints, bedding planes and fissures (Coleman 1965, 84; Fogg and Fogg 2001, 149). Caves occur most frequently in limestone because it is a permeable and soluble rock type of poor porosity. Composed chiefly of calcite, limestone is dissolved by the slightly acidic carbon dioxide contained in surface water, particularly rainwater and tannic acid from upland bogs. Over millennia, the continuous flow of erosive water combined with gradual chemical erosion cause underground fissures and joints to slowly enlarge, eventually developing into cave chambers and passages (Figure 3.2) (Coleman 1965, 7–9; Mitchell and Ryan 2001, 14–5). A swallowhole (also known as a sink or sinkhole) is an opening on the ground surface, frequently circular in plan, through which water passes underground. These vertical shafts are created from the corrosion of limestone by water and often open into larger subterranean systems. Infilled sinkholes appear in the landscape as

large circular depressions or craters and are known as dolines. Not all dolines are infilled sinkholes, however, as they can also be formed by suffusion or through the collapse of an underlying cave. Many dolines are of cultural significance, such as an example at Cloghers, Co. Kerry known as the ‘Devil’s Hole’. According to local folklore it was created by the devil when he disappeared underground following a failed attempt to carry a gambler and a priest with him (NFCS 443: 111).

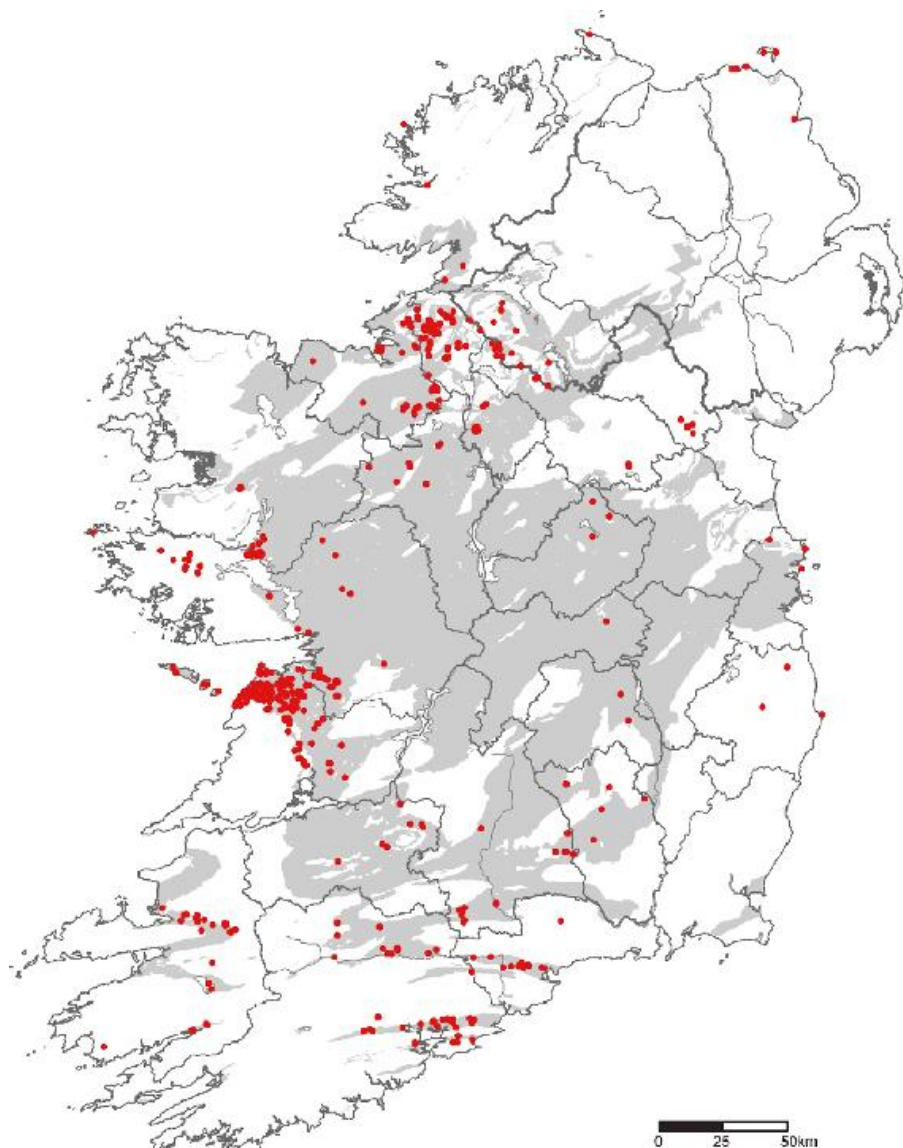


Figure 3.1 The distribution of limestone throughout Ireland, and the locations of 688 known caves in the Republic of Ireland as catalogued by Drew (2009). In several instances numerous cave locations overlap.

Coastal caves and caves in Northern Ireland are not included as the data is currently unavailable. A further 80 or so caves located primarily in counties Sligo and Leitrim were not documented by Drew and are not included here (Illustration Thorsten Kahlert)

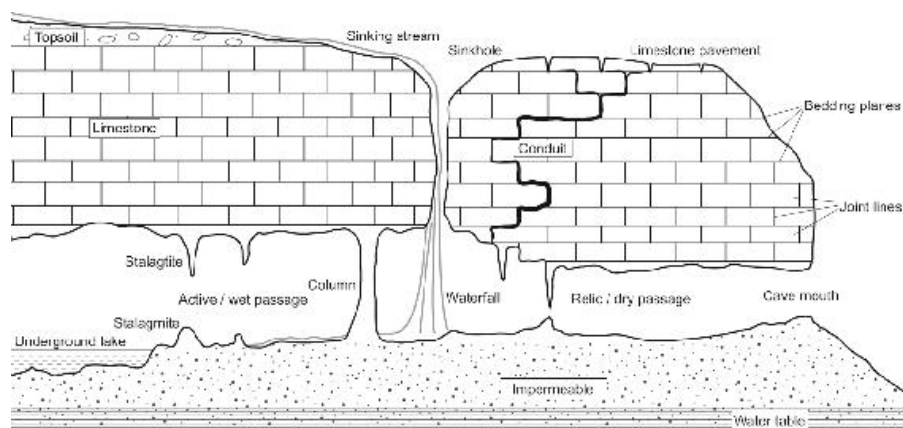


Figure 3.2 Schematic diagram of cave formation (Illustration Thorsten Kahlert)

Caves formed by chemical action are known as ‘true’ caves, but caves can also be created by physical erosion, typically along the coast as a consequence of marine action. Sea caves develop when fissures or joints in rock are enlarged by wave action. While almost all true caves in Ireland occur in limestone, sea caves can develop in any type of geology. For instance, Portbraddan Cave on the Antrim coast – a site used in the Mesolithic, Neolithic and Early Medieval period – occurs in basalt. Sea caves often have large entrances but are rarely deep or extensive. On occasion they can extend inwards and upwards through rock forming vertical L-shaped shafts that open onto the ground surface overhead. Seawater can dramatically burst upwards through these openings giving rise to the name ‘blowhole’. Once more, these features can be culturally significant. Several blowholes along the north Mayo coast are known as *Poll na Seantuinne* (hole of the hag) (MacNeill 1971/3). Other caves are formed by tectonic force (fissure caves) and are a consequence of any geological event that causes bodies of rock to move apart. These are not a result of solution and thus, like sea caves, are not considered true caves in a geological sense. Freeze-thaw action can also lead to the creation of caves.

ANATOMY OF A CAVE

As groundwater percolates downwards through rock, calcium carbonate – the chief constituent of limestone – combines with carbon

dioxide resulting in a bicarbonate compound. Deposition of this bicarbonate can lead to the development of secondary mineral deposits, collectively known as speleothems. The quantity of surface water, the thickness of the rock above the cave, the purity of the limestone, and the type of soil cover on the ground surface overhead all affect the rate of speleothem formation (Coleman 1965, 9). When percolating water reaches a cave chamber or passage some of the calcium carbonate is deposited at the point of entry. This develops into stalactites which descend from the cave roof. Residual carbonate that falls on the floor after the water has evaporated accumulates and very gradually builds upwards to form stalagmites, bosses or floors. Usually a greater degree of stalagmite rather than stalactite deposition takes place in caves. Other speleothems worth noting include curtains (thin undulating sheets of calcite hanging from cave roofs and walls); flowstone (sheets of calcite spread over cave floors and walls); straws (very thin stalactites); and moonmilk (soft creamy white concretions on cave walls or floors, similar in appearance to cauliflower) (Figure 3.3).



Figure 3.3 Speleothems from Irish caves (Photos Robert Mulraney, Thorsten Kahlert and Marion Dowd)

Within the architectural framework of caves, speleothems have

often been singled out as significant features by past peoples. In Neolithic and Early Bronze Age Italy, votive deposits were deliberately placed at stalagmites and stalactites, and similar patterns are evident at sacred caves in Minoan Crete (Whitehouse 1992, 132; Bradley 2000, 100). Speleothems were also occasionally used as raw material, perhaps because they were perceived as special, extra-ordinary or attractive. A microcrystalline stalactite bead of unknown date was discovered during excavations in Kilgreany Cave, Co. Waterford and a perforated straw stalactite of likely Early Medieval date was found in Cloghermore Cave, Co. Kerry (Dowd 2002, 86; Connolly, Coyne and Lynch 2005, 197). Were pieces of stalactite removed from these two caves, fashioned into beads, and then returned? Or were the beads made while underground and left behind in the caves? Another possibility is that they were worn by the dead: burials occurred in both caves.

COUNTING CAVES

All caves of natural origin – whether formed by solution, erosion or tectonic processes – are of relevance to this book. Sites are not excluded based on size. Whether a cave is just a few metres in length or stretches for kilometres, it has the potential to have been used by people in the past or to have been perceived as significant [the longest cave in the country is Pollnagollum-Polleva, Co. Clare at 15.6km (Barry 2010, 6)]. As outlined in Chapter 2, by the end of the 19th century only 35 caves in Ireland were known to the scientific community. By the 1960s Coleman (1965) had increased this figure to almost 300. More recently, Drew (2009) has catalogued 688 caves in the Republic of Ireland, achieving an overall total length of 147 km (Figure 3.1). Recently discovered sites are not on this list, for example, Moneen Cave and Christy's Cave in Co. Clare. In addition, the Shannon Group caving club has recorded 40 new caves in Leitrim (Peter Barry pers. comm.); Thorsten Kahlert (pers. comm.) has surveyed a further 40 caves Sligo and Leitrim that were not previously documented; and Peter Barry (pers. comm.) has estimated 210 caves in Northern Ireland. Overall, therefore, at least 980 'true' caves are scattered across the island. This figure increases annually as new sites are discovered. No estimate is currently available for the number of sea caves or tectonic caves in Ireland. The latter is probably modest in size, but sea caves are numerous – a figure of anywhere between 500 and 2500 is entirely plausible, particularly considering the number of islands in Irish waters.

For reasons stated above, caves are not evenly distributed across all limestone regions (Figure 3.1). In the Republic of Ireland over 80% of the 688 recorded caves are located in just five of the 26 counties:

Clare (259 or 37.6% of caves), Leitrim (99 caves), Galway (66 caves), Cork (65 caves) and Sligo (64 caves) (Drew 2009). This type of data is not yet available for Northern Ireland. Concentrations of caves are not necessarily commensurate with concentrations of caves of archaeological significance. While Clare currently has the highest number of caves of archaeological significance (16 caves) in the Republic of Ireland, this is closely followed by Cork (14 caves) and Waterford (10 caves). The disparity is due to several factors. Firstly, the archaeological potential of a cave is determined by whether it would have been available for use in the past. In the Republic of Ireland 52% of caves are active which means a stream or river runs through them. The remaining 48% of sites are known as relict – caves that have been abandoned by the river or stream that originally created them (Drew 2009, 8). It is in these ‘dry caves’ that archaeological deposits survive. Based on Drew’s estimates, there are at least 326 relict caves in the Republic of Ireland and thus conceivably 326 caves of archaeological potential. Cork, Waterford and Sligo have a high percentage of relict caves and it is not surprising to find that a higher proportion of caves in these counties contain archaeological deposits. A second significant factor noted in the last chapter is that antiquarian investigations in the late 19th and early 20th centuries tended to target groups of caves that occurred in close proximity to one another rather than single sites. This led to the identification of clusters of caves with evidence of human activities in places such as Ballintoy, Co. Antrim, Edenvale, Co. Clare and the Dungarvan Valley, Co. Waterford. Thirdly, archaeological deposits in caves are more likely to be discovered in those regions where cavers are actively exploring. For the past few decades most cavers in Ireland and visiting Ireland have concentrated their caving activities in counties Clare and Fermanagh.

Though active caves are rarely listed as archaeological sites, many may have been culturally and symbolically important in the past, but with little or no chance of physical evidence surviving. If material was deposited in an active cave it would either perish or be washed deeper underground or through a cave and back outside again. That said, some active caves are recorded archaeological sites. The Mile River, for instance, flows through Creevy Cave, Co. Monaghan, yet in a dry part of the system evidence of human activities suggests that the cave was used as a refuge or place of temporary shelter in post-Medieval times (Dowd *et al.* 2011). In karst landscapes few rivers occur on the ground surface as they typically flow underground. This phenomenon must have been noticed in the past and may have been considered a significant factor in how active caves were perceived. Parker Pearson (1999, 132) has suggested that ‘places in which water periodically

appeared and disappeared may have been considered as entry points to the underworld'. An active cave which is of cultural though not archaeological significance is the Cave of the Wild Horses, Co. Clare (Figure 3.4). After periods of heavy and prolonged rainfall, water gushes out from the cave entrance flooding the surrounding fields. Since at least the 1730s supernatural horses and fish were said to emerge from the cave during floods and folktales about the site are numerous (O'Donovan and Curry 1839).



Figure 3.4 The Cave of the Wild Horses, Co. Clare from which supernatural horses emerge during flooding (Photo Colin Bunce)

WHEN IS A CAVE NOT A CAVE?

As Barnatt and Edmonds (2002, 127) rightly contend, it 'is a modern conceit to assume that past communities would have held geology and architecture apart in the same way as we ourselves'. Instances are numerous of artificial monuments that were perceived to be natural caves, typically if the monument consisted of a dark enclosed underground space. The most telling example is found in the Ordnance Survey Maps first compiled in the 1830s and 1840s where *cave* appears with frequency to denote not only natural caverns but also Neolithic passage tombs and Early Medieval souterrains. Distinction was not made between natural and artificial, or between prehistoric and historic. A similar phenomenon is apparent in the linguistics of Old Irish in that the terms *úam*, *úaim*, *úama* or *uaimh* have been used interchangeably to denote cave, souterrain and

passage tomb (Condon 1942, 24–5; Joyce 1913, 438–9).

Monuments are more likely to have been confused with natural caves after a period of time had elapsed since their initial construction. The reverse is also plausible: some caves may have been interpreted as human constructions (Bradley 2000, 35; Davies and Robb 2004, 141). In an Irish context it is passage tombs in particular that have been perceived as caves. The Annals of Ulster, compiled during the Medieval period, recorded for the year AD 862 that the ‘cave of Achadh-Aldai, and of Cnodhba, and the cave of Fert-Boadan over Dubadh, and the cave of the smith’s wife, were searched by the foreigners’ (Lucas 1971/3, 171). The caves of Cnodhba and Dubadh that were ‘searched’ by the Vikings are in fact the passage tombs of Knowth and Dowth respectively (Figure 3.5). The Annals of Inisfallen recorded another Viking attack, this time in Co. Kerry, for the year AD 866: ‘Bárid with a great fleet from Áth Cliath by sea westwards, and he plundered Ciarraige Luachra underground, i.e. the raiding of the caves ... and they left not a cave there underground that they did not dig’ (*ibid.*, 171). In this instance ‘caves’ probably refers to souterrains as this is a region where megalithic tombs are scarce but Early Medieval settlements are plentiful. These manuscript references suggest that Medieval people did not distinguish between subterranean spaces that were natural as opposed to those that were artificial: they were all caves. Several centuries later, in 1699, when antiquarian Edward Lhwyd recorded Newgrange passage tomb he referred to it as a cave, and since then it has been repeatedly referred to as a cave by antiquarians and locals alike (O’Kelly 1994, 24).



Prehistoric and historic mining activities have also led to the creation of artificial caves. St. Crohane's Hermitage, Co. Kerry has been venerated for several centuries because St. Crohane reputedly spent time in prayer and reflection there. An account from 1756 recorded that the 'stalactical exudations' in the 'cave' were esteemed by local people for their curative properties (MacNeill 1982, 649). Only recently has St. Crohane's Hermitage been identified as a prehistoric mine but, outside of academic literature, it continues to be perceived as a cave (O'Sullivan and Sheehan 1996, 76). In a similar vein, a hoard of 12 polished stone axes and fragments of copper ore were found buried at the entrance of a prehistoric copper mine in Ballyrisode, Co. Cork (O'Brien 1987, 52, 64–5). This votive offering may have marked the significance of a place where valued ore had been extracted, but the morphological similarities between the abandoned mine and a small cave cannot have been lost on those who deposited the hoard. People may have speculated that this was how caves originated, i.e. through the mining efforts of the ancestors or mythical beings. Somewhat more calculated are instances where artificial caves were deliberately constructed if a natural one did not exist. Arguably the most famous cave in historic times was St. Patrick's Purgatory, Co. Donegal, renowned across northwest Europe as a place of Christian pilgrimage since at least the 12th century. Though repeatedly referred to as a cave in Medieval texts, and promoted and perceived as such, this was an artificial structure that resembled a large souterrain (see Chapter 9).

WHEN IS A CAVE AN ARCHAEOLOGICAL SITE?

With over 326 relict caves in the Republic of Ireland, an unknown number of relict caves in Northern Ireland, in addition to sea caves and tectonic caves, it is possible that somewhere in the region of 400 to 600 natural caves across the island have the potential to be of archaeological significance. Furthermore, as mentioned above, some active caves may also be archaeological sites. In terms of what makes a cave an archaeological monument, and in consideration of the National Monuments Acts 1930 to 2004 which are relevant to the Republic of Ireland, I suggest that one or more of the following criteria should apply:

- A cave that contains archaeological artefacts or human bones
- A cave that contains animal bones that relate to human activities

- A cave with structural modifications
- A cave with art (e.g. paintings, sculpture, engravings, carvings)

These criteria should be seen as a *guide* to the designation of a cave as an archaeological monument, but I would propose that any evidence which indicates that a cave was a place where past human activities took place should be sufficient to warrant designation. Notwithstanding this, under the National Monuments legislation an operational date of AD 1700 is currently used as the cut-off point for archaeological monuments in the Republic, pending the outcome of a review. Consequently, this excludes many caves that were utilised and of significance to people and communities from the 18th century onwards (see Chapter 10). My approach has been to consider all caves of cultural significance as equally important, whether based on archaeological evidence, historical narratives, mythology, folklore or ethno-historical accounts. Many of these caves, however, are not afforded legislative protection and are not included as archaeological monuments on the statutory lists of recorded monuments.

At the time of writing I have identified 91 caves in Ireland that adhere to the classification of an archaeological monument as outlined above (Figure 3.6; see Appendix 1). Nineteen of these caves are located in Northern Ireland, confined to two counties – Antrim (11) and Fermanagh (8). The remaining 72 caves occur in the Republic of Ireland scattered across 16 counties – Clare (16), Cork (14), Donegal (2), Dublin (1), Galway (1), Kerry (7), Kilkenny (1), Laois (1), Leitrim (1), Limerick (4), Mayo (3), Monaghan (1), Roscommon (1), Sligo (5), Waterford (10) and Wicklow (4). Clusters of caves at Kesh, Co. Sligo and Knockmore, Co. Fermanagh are listed here as one site each though both complexes comprise more than 16 individual caves. Every few years new caves of archaeological significance are discovered or archaeological deposits in known caves are revealed. Creevy Cave, Co. Monaghan, for example, was only designated an archaeological site in 2010 and Moneen Cave, Co. Clare was added the following year (Dowd *et al.* 2011; Casserly and Dowd 2011). Future discoveries and targeted research programmes will continue to increase the current figure of 91 sites. In fact, there are numerous references in antiquarian and recent literature to the presence of bones in a cave; a proportion of these sites are likely to be archaeological in nature but such can only be established by osteological examination of the remains *in situ* or through archaeological excavation and analysis.

The 91 caves of archaeological significance vary from sites with human bones of prehistoric date, to early historic occupation sites, to caves made sacred through their association with holy wells. The

periods best represented in the collective archaeological assemblages from Irish caves are the Neolithic, Bronze Age and Early Medieval. There is a paucity – but not a total absence – of Mesolithic, Iron Age, Medieval and post-Medieval material. Prehistoric activities in caves generally tend to relate to funerary and ritual activities, whereas finds from historic periods typically reflect secular activities, though the ritual and religious dimension to caves continued. Many caves were multi-period sites, sometimes reused for the same purpose, sometimes for entirely different functions. For instance, excavations at Kilgreany Cave, Co. Waterford have revealed activities of Mesolithic, Neolithic, Bronze Age, possible Iron Age, Early Medieval, Medieval and post-Medieval date. Broadly speaking, the prehistoric phases at Kilgreany relate to burial and votive deposition while the historic finds indicate occupation and refuge (Dowd 2002).

PROBLEMS WITH THE RECORD

Cave archaeology is a relatively new development in Irish archaeological research, not least because of problems associated with caves as archaeological sites (problems that do not normally apply to sites aboveground) as well as the unique manner in which caves have been investigated over the past 200 years. Some of these issues and their consequences are explored here.

Disturbed stratigraphy

Many archaeological site types suffer stratigraphic disturbance but caves are protected and enclosed micro-environments in which a unique set of natural and cultural formation processes can occur. This includes disturbance of strata and dispersal of material by animals occupying a cave (badgers, foxes, wolves, bears etc.), as well as repeated human activities over long periods of time (occupation, burial, ritual etc.). Natural processes within a cave such as rock fall, collapsing entrances, fluctuations in the water table and flooding will also affect archaeological stratification.

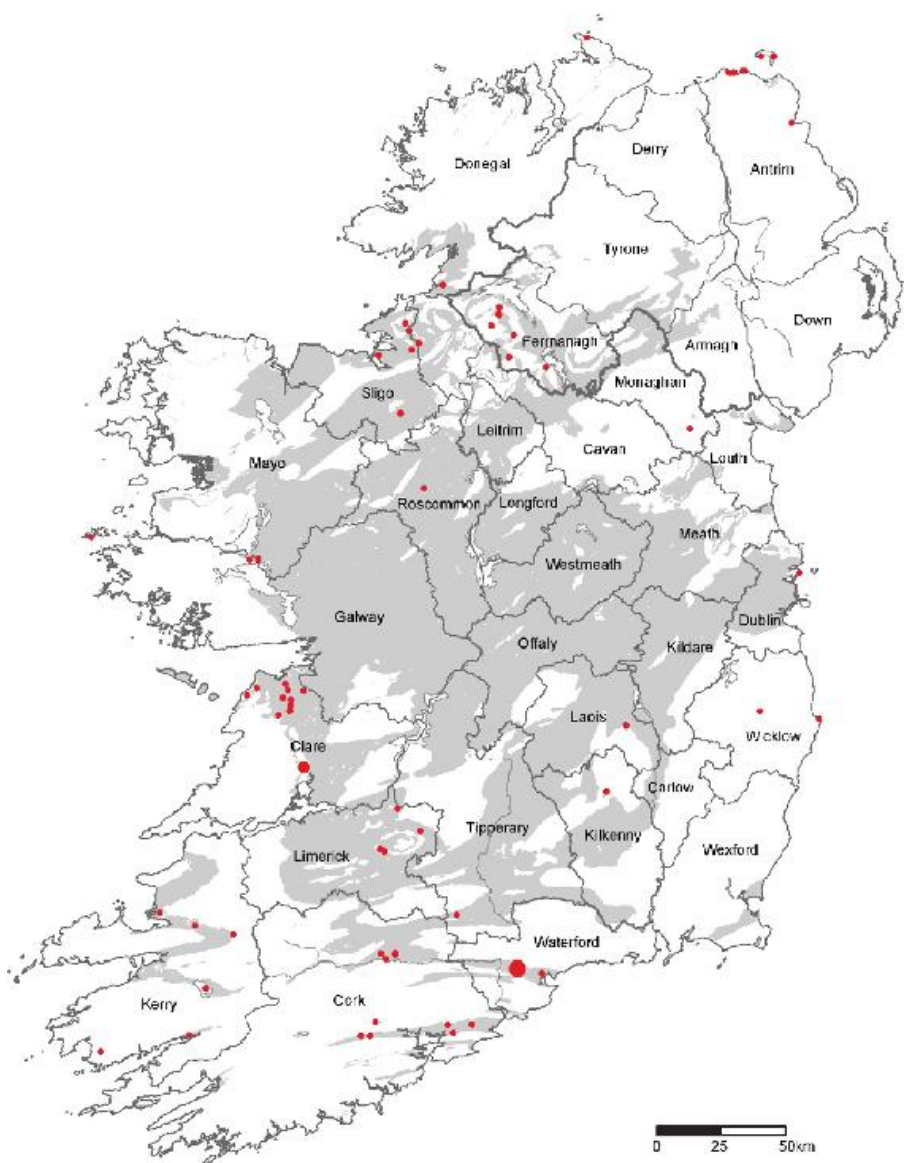


Figure 3.6 Distribution of caves of archaeological significance in Ireland

In my experience, the most useful approach to adopt with regard to archaeological material from caves is to start with the assumption that strata are disturbed and that archaeological material is not *in situ*. In fact, many caves are little more than receptacles of *ex situ* collections of bones and artefacts. Often what appear to be defined archaeological layers are in fact heavily reworked. There are consequently limitations to the inferences and interpretations that can be drawn. Material from widely differing time periods and activities can be found in the same layer and location, with the result that dating by association is fraught

with uncertainty and is usually very unreliable. For example, during the 2004 excavations in Glencurran Cave, Co. Clare, prehistoric beads, a stone axe and a series of human and animal bones (several of which were later radiocarbon dated to the Bronze Age) were recovered from an area measuring approximately 1m x 4m. All the material derived from what appeared to be an undisturbed stratum – that was, until a set of modern earphones was discovered beneath the prehistoric finds. Badger latrine pits, a badger sett, flooding and recent visitors had also interfered to a lesser or greater extent with the archaeological deposits at this site (Dowd 2007b; 2009).

It could be argued that a greater degree of caution is required when disentangling phases and types of activities in caves compared to sites aboveground. The discovery of diagnostic artefacts in a cave is an aid to establishing periods of activity, but these usually cannot be used to securely date the context or stratum in which they occur. The recovery of undiagnostic artefacts that could conceivably date to one of several periods is more usual. Beads, pendants, spindle whorls, whetstones, worked bone and antler, and iron objects are common finds in Irish caves but most cannot be closely dated. Similar problems have been noted with regard to British cave archaeology: stratigraphy in the majority of caves is not intact or reliable; many sites are multi-period; and it is frequently difficult to distinguish different periods of use (Gilks 1989). Superimposed palimpsests of events can occasionally survive in caves, particularly if access was blocked after the final stage of usage and if animal activities were minimal, but even then careful excavation and extensive radiocarbon dating are required to extrapolate different phases of activities.

On the plus side, the protective, stable and alkaline environment of caves is considerably more advantageous for the preservation of certain types of archaeological material such as glass, amber, bones and organic remains. Ancient DNA is also more likely to survive in bones recovered from caves compared to bones from other contexts. For instance, in a recent Irish project nine red deer bones from five different caves all yielded aDNA whereas 11 red deer bones from ten aboveground sites and one cave did not yield any aDNA (Carden *et al.* 2012). At present aDNA has only been successfully extracted from one prehistoric human skeleton in Ireland – that of a 2–3 year old child of Bronze Age date from Glencurran Cave (Dowd and Bunce 2009, 9). Building a database of aDNA from prehistoric human remains will be most successful if the samples derive from cave environments.

Nature of cave excavations

The archaeological assemblages that survive from the 91 caves of archaeological significance are largely thanks to antiquarian

investigations and casual discoveries. Just 45 of these sites have been excavated, 34 of which were investigated prior to 1950 while ten were excavated between 1992 and 2011. This means that just under 11% of the known caves of archaeological significance in Ireland (i.e. 10 of the 91 sites) have been excavated by archaeologists to modern scientific standards – a sobering statistic.

Whilst acknowledging the debt that is owed to early explorers (see Chapter 2), the excavation techniques employed in the 19th and early 20th century were not of today's standards. Antiquarian excavations in caves usually did not involve wet sieving, though several reports refer to 'sifting' material outside cave entrances. Without wet sieving many small bones and artefacts are likely to have been overlooked. Another issue is that some objects (e.g. lithic debitage) may not have been recognised as archaeological, considering that many of the early investigations were palaeontological exercises and the recovery of archaeological material was incidental. In many cases antiquarian recording was minimal. Usually no more than three strata were identified at a site – often a lower sterile stratum associated with extinct faunal remains and an upper 'cultural' layer. This simple designation without doubt masked much more complex stratification. It also seems that contexts and features were simply not observed or recorded: for instance, postholes, pits and stakeholes are almost never noted in the reports of pre-1950 cave investigations. To their credit, findspots of artefacts and bones were often recorded by antiquarians and approximate spatial locations were plotted, typically in terms of distances inside the entrance. In such instances it is possible to recreate a basic spatial patterning of where material was encountered within a cave, but this is largely dependent on whether the records survive to the present day.

Loss of original documentation and records

One of the greatest problems facing Irish cave archaeology is that many antiquarian records and finds cannot be located, having been lost or destroyed sometime after the original investigation. In several cases entire assemblages of material are missing, though publications outline the general findings. For instance, antiquarian Thomas Plunkett carried out excavations in 14 or 15 caves on and around Knockmore Mountain, Co. Fermanagh during the 1870s (Plunkett 1878) but none of the excavation records, human remains, animal bones, or artefacts can be located at present despite extensive searches in Ireland and Britain. The absence of Plunkett's paper archive means that the caves he investigated cannot now be correlated with known caves at Knockmore. The loss of data in this particular instance is emphasised by one account: 'I found between ten and eleven hundred-

weight of animal remains, representing a great variety of species and some hundreds of individuals ... I also found human remains which – including what I found in Knockninny – would represent nearly thirty individuals’ (Plunkett 1876, 133–4). This issue is not unique to Ireland. Gilks (1989, 13) estimated that between 40% and 50% of the excavated material, archaeological archives and documentation relating to English caves of archaeological significance has also been lost.

In the case of the Knockmore caves, the entire excavation archive and archaeological assemblages are missing. It is more common, however, to find that part of an archive has survived but part has been lost. Some artefacts were traded or exported. Material and records that were not considered worth retaining were destroyed. Some bone assemblages were sent to medical doctors, anatomists or natural historians but never returned. Portbraddan Cave, Co. Antrim is one such example. The site was excavated in the 1930s to relatively high standards for the time. The published report contains plans and sections of the excavated deposits as well as a good description of each stratum encountered and the artefacts and ecofacts it contained (May 1943). The artefacts and some animal bones are now housed in the Ulster Museum, Belfast. However, the remains of three human skeletons (apparently adult females) found in the cave and described in the report can no longer be located. It is possible they await discovery in a university or museum in Britain, but it is equally plausible that they were reburied or destroyed. Stratigraphic evidence suggests that the skeletons may have been of Early Medieval date, possibly associated with Viking activities, but without an opportunity to radiocarbon date the bones this hypothesis cannot be tested.

In the case of some older discoveries it is likely that human bones found in caves were sometimes reinterred in unmarked graves in modern Christian cemeteries. This may have been the fate of a human skeleton that was discovered in Piper’s Cave, Co. Donegal in 1929. Some of the bones were sent to London where they were deemed – for an unrecorded reason – to be ‘between 400 and 600 years old’. A local doctor and police sergeant subsequently sought funding from the Board of Health and the skeleton was ‘disposed of ... somewhere’ (Hamilton 1950, 84). Reburial in an unmarked grave in consecrated ground would have been a likely outcome for discoveries such as this in 1920s Ireland.

Political affairs have also occasionally contributed to the loss of archaeological data. Brothers’ Cave and Oonaghlour Cave in Co. Waterford were methodically excavated by Colonel Richard Forsayeth between 1906 and 1913 (Forsayeth 1931; Dowd and Corlett 2002). The Colonel kept meticulous notes, illustrated many of the finds, and

took photographs of the excavation. His notebooks indicate that he recovered approximately 550 human bones representing at least eight individuals and over 360 artefacts from the two sites. The finds were curated and displayed in two rooms of his residence, Whitechurch House. When the house was taken over and occupied during the War of Independence in 1920, the collection was dispersed and many of the more valuable items disappeared, including a Late Bronze Age metal hoard (Figure 3.7). Some of the material was later salvaged and eventually deposited in the NMI, and a small quantity of artefacts has turned up in a private collection in Cornwall. Unfortunately, however, approximately 50% of the artefacts and 85% of the human bones from Brothers' Cave and Oonaglour Cave are missing or destroyed which does not allow for detailed analysis and assessment. Fortunately, most of Forsayeth's documentation survives to reveal that these caves were important multi-period sites with pronounced phases of activity in the Neolithic, Bronze Age and Early Medieval periods.

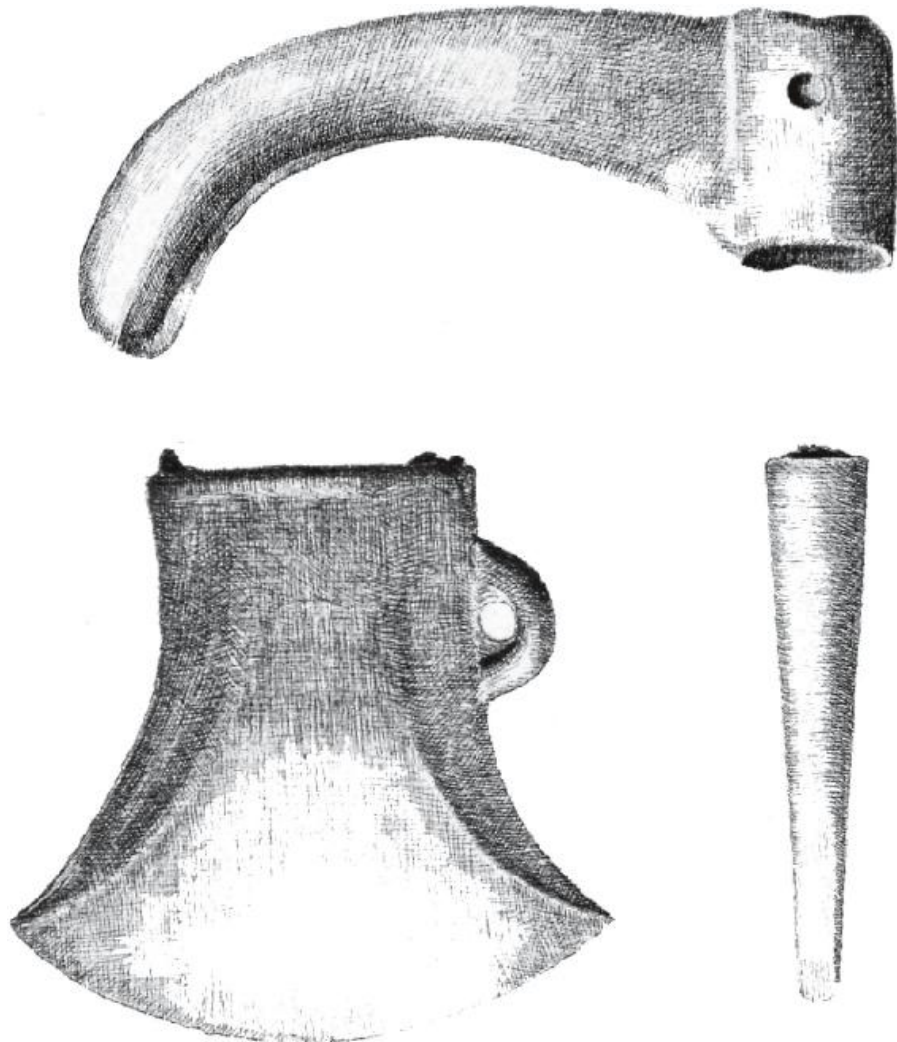


Figure 3.7 Late Bronze Age hoard discovered in Brothers' Cave, Co. Waterford in 1906; current location unknown (Illustration Colonel R. W. Forsayeth; reproduced by permission of the RSAI)

Publication of excavations

A curious factor which may partially explain why caves in Ireland escaped archaeological attention for so long is that many early discoveries were published in non-archaeological journals such as the *British Association for the Advancement of Science*, *The Irish Naturalist* and the geological section of the *Proceedings of the Royal Irish Academy*. More recent discoveries have typically appeared in caving magazines and journals such as *Irish Speleology* and *Descent*. In effect, therefore, archaeological data was available but in publications that

were not frequently consulted by archaeologists.

Issues with human bone assemblages and the importance of radiocarbon dating

When human remains occur in Irish caves they usually consist of small quantities of disarticulated bones, typically dispersed horizontally and vertically through cave strata with little or no stratigraphic integrity. Complete skeletons and intact burials of any date are rare. Frequently it is not possible to interpret the activities represented by such small scatters, even more so when dealing with surface finds at sites that have never been formally excavated. Interpretation and modern analysis is also hampered if the human bones disappear after the initial discovery. One example is Alice and Gwendoline Cave, Co. Clare from which a collection of human bones was recovered during excavations in 1902 and 1903 (Scharff *et al.* 1906). The disproportionate number of peripheral skeletal elements strongly suggests that this was a place of excarnation. However, by 2007 just one human bone from the site – an adult clavicle fragment – could be located. The artefact assemblage indicates that this cave was a multi-period site but the absence of the human skeletal material seriously impedes a fuller understanding of the date and nature of the activities that took place.

The need for comprehensive radiocarbon dating programmes cannot be overemphasised when dealing with caves. Because very small quantities of human bones are usual, a danger lies in assuming that a single date reflects the entire assemblage, particularly when the minimum number of individuals (MNI) is one. A case in point is Connaberry Cave C, Co. Cork. Fifteen human bones were recovered from this site and osteoarchaeological analysis suggested that these derived from one adult (Fibiger forthcoming). However, radiocarbon dating revealed the presence of two individuals, one of Neolithic and one of Medieval date. It is not possible to distinguish which bones relate to which individual unless every bone is dated and this might reveal an even greater MNI. Similarly, approximately 30 human bones were recovered during antiquarian excavations in the Catacombs, Co. Clare (Scharff *et al.* 1906), 22 of which can be located at present. Osteoarchaeological analysis indicated the presence of three individuals (Fibiger forthcoming), but radiocarbon dating identified a fourth individual. This modest assemblage represents a Late Bronze Age adolescent, two Early Medieval adults and a Medieval child. Once again it is entirely plausible that more than four individuals are present because artefacts recovered from the Catacombs, together with evidence from neighbouring caves, suggest that this site was also used for ritual purposes during the Neolithic.

An additional complication arises when small assemblages of human bone from caves are composed primarily of small skeletal elements. Peripheral elements – which might relate to specific activities such as excarnation – may not reach the required weight necessary for AMS dating. Even in cases where the minimum weight requirement is met, there may be insufficient collagen survival. At Bats' Cave, Co. Clare, an infant is represented by just two vertebrae, each weighing 1 gramme or less (Fibiger forthcoming). While these could plausibly return a satisfactory date, they are risky samples considering the low weights balanced against the cost of an AMS date and the potential loss of an important bone without any return of data. The value of a date must therefore be evaluated in terms of a finite resource.

Interpreting human bone assemblages

A range of possible explanations need to be considered in every instance when assessing an assemblage of human bones from a cave, regardless of the date of the individual or individuals involved. In some cases the nature of the remains may never be revealed (Figure 3.8). Human remains from caves can reflect a wide range of archaeological activities and natural processes. For instance, meat bearing elements and larger human bones may have been dragged into caves by scavengers such as wolves, bears and foxes. In other instances human bones can be washed underground by floods, or may enter caves from sites aboveground via openings in cave roofs and walls. Other human bones can reflect natural deaths – perhaps an individual who sought refuge or took shelter in a cave when ill or injured and subsequently died, or someone who had a fatal accident underground. The latter phenomenon occurs up to the present day. In 1981 cave diver David Woods drowned while exploring Pollnacrom Cave, Co. Fermanagh; his body could not be recovered and is still in the cave (Jones *et al.* 1997, 38). A range of human activities also lead to the deposition of human bodies, body parts, or bones in caves. Corpses can be unceremoniously dumped into caves, perhaps victims of disease or conflict. Prisoners or hostages may die while imprisoned in a cave. Funerary practices and ritual activities such as burial, excarnation and votive deposition also result in the accumulation of human bones.



Figure 3.8 Late Medieval skeleton of an adolescent boy from Moneen Cave, Co. Clare: clandestine burial, natural death underground or murder victim? (Photo Quentin Cowper)

It may not be possible to ever identify what a collection of human bones from a cave represents, particularly considering the lack of stratigraphic integrity at the vast majority of sites, but osteoarchaeological analysis may identify or eliminate some possibilities. If human bones have been introduced by carnivores, gnaw marks might be expected and there may be a specific spatial patterning to the distribution of remains within a cave system (e.g. Krajcarz and Krajcarz 2012; Mihai *et al.* 2010). Weathering and abrasion on bones may indicate exposure of skeletal remains outside a cave or transportation by moving water. If an individual died in a cave or a cadaver was dumped, a complete skeleton might be expected but with no formal arrangement of the corpse and no gravegoods. In contrast, if a skeleton represents a burial, a formal arrangement of the remains might be expected and possibly also associated gravegoods. Other cultural activities, such as token deposition of disarticulated bones or use of a cave for excarnation, are more difficult to disentangle and recognise.

The rationale employed in this book, though somewhat crude, is that in the case of a disturbed burial or an intact skeleton one might expect the presence of different anatomical regions, skeletal elements

of various sizes, and a significant number of bones. If a cave has been used for excarnation there is likely to be a greater preponderance of small skeletal elements such as finger and toe bones, bones that would have been missed when the larger and more visible remains were removed for secondary deposition to another location. At places of token deposition, where a selection of bones have been brought to a cave from a different primary location, one might expect to find small numbers of bones but with more variation in the types and sizes of bones present, such as long bones and skull fragments in addition to smaller skeletal elements. This schema has been used to interpret human remains of prehistoric and historic date from Irish caves if natural agencies and processes do not seem to apply. Where isolated bones of historic date occur, this model may initially appear unlikely considering that the population was by and large Christian. However, practices such as the cult of relics involved the dispersal and movement of disarticulated human bones in Early Medieval and Late Medieval times (Ó Carragáin 2003). While the approach adopted in this book is open to criticism, at present it offers a workable model when faced with the varied stratigraphic, contextual and dating problems inherent in Irish cave assemblages. I try not to force interpretations and thus in some instances have offered a number of possibilities to explain for the presence of human bones at certain sites; even then there are alternate possibilities. The objective has been to attempt to make some sense of what is an undeniably difficult set of data rather than abandoning it as futile given the number of problematic issues. It is hoped that in the future more sophisticated techniques will emerge with which to distinguish between the different processes and practices that result in the occurrence of human bones in caves.

Faunal remains

Caves are rich sources of animal bones (Figure 3.9). Indeed, the majority of Irish palaeontological collections have been recovered from caves – a direct consequence of the fact that from the mid 19th century caves were specifically targeted for the recovery of extinct faunal remains as reflected in the antiquarian term ‘bone caves’ (see Chapter 2). Robert Lloyd Praeger (1997, 140–1) commented that the 1901 excavations in the Kesh Caves, Co. Sligo produced ‘a whole museum of bones ... remains of some seventy kinds of animals’.



Figure 3.9 Animal bones from the antiquarian excavations of the Edenvale cave complex, Co. Clare (Photo Ruth Carden)

Simms (1994) has outlined three natural processes by which faunal remains are introduced into caves: biotic autochthonous, biotic allochthonous and abiotic allochthonous. Biotic autochthonous processes relate to animals that die in caves. They may enter a cave in search of prey, water, refuge or shelter but then die after becoming trapped, lost or killed by other animals. Vertebrates such as bats and bears use caves as hibernacula during which time mortality rates are high. Hibernation failure accounted for the skeletons of several adult and juvenile bears from a cave known as *Poll na mBéar* (cave of the bears) in Co. Leitrim (Simms and Monaghan 2000, 53). Biotic allochthonous processes refer to bones of prey brought into a cave by predators for consumption; a cave used as a den may contain bones of both prey and predator. Abiotic allochthonous processes relate to animal bones that fall, or are washed, into caves including bones that were introduced from aboveground if part of a cave collapses (Simms 1994, 270-2). In addition to natural processes, human activities are also responsible for the occurrence of animal bones in caves. The presence of 49 dog skeletons in Wolves' Hole Cave, Co. Galway was interpreted as evidence that this was a dump site for unwanted dogs (Harrington 1973, 32). Yet other bones may reflect animal corpses or meat joints that were placed in caves as gravegoods or votive offerings, for instance the Bronze Age remains of newborn calves, piglets and lambs found with other offerings at Glencurran Cave (Dowd 2009). Butchered animal bones are frequent finds in caves and

may reflect the discard of food waste, occupation and/or food processing.

Only recently has the archaeological significance of the faunal collections from Irish caves been recognised. Part of the problem lies in the vast size of the assemblages: somewhere in the region of 60,000 to 80,000 animal bones from old cave excavations are located in the NMI alone (Ruth Carden pers. comm.). A major issue is disentangling the animal bones that relate to human activities as opposed to those that represent natural occurrences. Usually the stratigraphic location of animal bones is of little help – extinct faunal remains have regularly been recovered from layers that contain archaeological artefacts of late prehistoric and early historic date (e.g. Adams *et al.* 1881; Scharff *et al.* 1906). Faunal remains of archaeological interest are not difficult to identify if they display signs of human interference such as butchery or skinning marks, burning, or evidence of smashing for marrow extraction. However, many animal bones that *do* relate to human activities have no such indicators. At Moneen Cave, Co. Clare amongst an assemblage of 3125 animal bones and bone fragments, just four bones had butchery marks, including one of Late Bronze Age date. Without doubt some of the other unmodified animal bones were also the result of human activities, specifically the bones of domesticates and fish considering the remote upland location of the site (Dowd 2013a). Spatial patterning can also occasionally reveal human activities. At Glencurran Cave the remains of five hares were discovered deep in the cave amongst deposits of prehistoric human bones, lithics, pottery and shell beads. Though none of the hare bones displayed butchery marks, they almost certainly represent animals that were deliberately deposited together with other offerings, a hypothesis supported by radiocarbon results (Dowd 2009).

The vast majority of faunal assemblages from caves have not been analysed to modern scientific standards, though significant inroads have been made in recent years. The most important development has been a modern osteological analysis of the faunal remains recovered from five caves in Co. Clare that were excavated between 1902 and 1904 – all are archaeological sites (Carden and Lewis 2010). In the region of 70,000 animal bones were retrieved during the antiquarian excavation (Scharff 1906, 3), but only approximately 26,000 of these bones can be located at present. Some valuable data has emerged as a result of the reanalysis highlighting the general archaeological potential of faunal assemblages from caves. Between 5% and 10% of the identifiable bones from each of the five caves bore evidence of human activities in the form of butchery marks, deliberate smashing of bones for marrow extraction, or burning (Carden and Lewis 2010). Approximately 20% to 25% of animal bones displayed evidence of

carnivore damage (*ibid.*) which contrasts with human bone assemblages where there are no indications of scavenging, suggesting that access into caves was controlled at particular times with regard to specific human activities (Dowd, Fibiger and Lynch 2006, 17). That many animals lived or hibernated in caves is likely to have contributed to how people in the past viewed these creatures as well as the dark worlds from which they emerged. It is probably not coincidental that the only examples of perforated wolf and bear teeth currently known in Ireland have been found in caves.

Ruth Carden (pers. comm.) is currently conducting osteological analysis of all the animal bones that have been recovered from Irish caves. Following this, a comprehensive radiocarbon dating programme, targeting bones that relate to human activities in particular, is crucial towards establishing a clearer picture of the relationship between people, animals and caves in the past.

FORGOTTEN PLACES: CAVES THROUGH THE ARCHAEOLOGIST'S LENS

Caves are topographical features that attract multi-disciplinary interest from geologists, geomorphologists, hydrologists, biologists, ecologists, zoologists, palaeontologists, historians, folklorists and – not least – archaeologists. Across Europe discoveries of Palaeolithic art and artefacts served as a catalyst for the investigation of caves in the 19th century, and thus cave archaeology has been an established discipline in many countries for a considerable period. However, in much of Europe cave archaeology has been seen as synonymous with Palaeolithic archaeology: only recently has research expanded to include cave use from the Mesolithic through to post-Medieval times. This traditional scholarly association between caves and the Palaeolithic is part of the reason why there has been a lack of interest in cave archaeology in Ireland, a country where a Palaeolithic presence has not yet been identified.

In the 1920s and 1930s Kilgreany Cave, Co. Waterford came to the attention of archaeologists as potentially the first Palaeolithic site in the country, a controversy that was not resolved for several further decades (Tratman 1929; Ó Ríordáin 1931; Movius 1935; Dowd 2002). For many years it remained the only cave to feature in any significant way in Irish archaeological discourse. Caves have scarcely been mentioned, let alone discussed, in any of the general syntheses on Irish prehistory (e.g. Wakeman 1891; Macalister 1928; Ó Ríordáin 1942; Herity and Eogan 1977; Harbison 1988; O' Kelly 1989; Mallory and McNeill 1991; Cooney and Grogan 1994; Waddell 1998; 2000; Bradley 2007). Similarly, core text books pertinent to particular prehistoric periods rarely if ever refer to caves (for instance, Woodman 1978 for the Mesolithic; Waddell and Shee Twohig 1995 for

the Bronze Age; and Raftery 1994 for the Iron Age). The exception is the Neolithic period. By the late 1990s a small corpus of radiocarbon dates on human bones from caves had been obtained which led to a gradual appreciation that these were places of funerary activity in the Neolithic (Ó Floinn 1992; Woodman *et al.* 1999; Cooney 2000). Knockninny Cave, Co. Fermanagh and Knockane Cave, Co. Cork also featured in *Bronze Age burials of Ireland* (Waddell 1990). In terms of historic usage, Edwards (1990, 47) drew attention to the significance of caves as places of Early Medieval occupation and the *Early Medieval Archaeology Project* has included an overview of cave sites (O'Sullivan *et al.* 2014), but generally this avenue of research has not been explored in any depth by archaeologists or historians. Likewise, caves do not feature even fleetingly in any of the main texts on Medieval Ireland (e.g. Barry 1988; O'Connor 1998; O'Keeffe 2000; Duffy, Edwards and Fitzpatrick 2001). A notable exception to the general rule is that regional archaeological inventories tend to include caves of archaeological importance (e.g. Moore 1999; Power *et al.* 1994; Power *et al.* 2000; Forsythe and McConkey 2012).

It is fair to say that while the importance of certain individual cave sites has been recognised in the existing archaeological literature, the greater significance of caves as a coherent archaeological site type or context has been largely overlooked. The extant literature generally suggests that caves are of little or no consequence in Irish archaeology. This is a serious oversight. Caves are one of the few environments to have produced evidence of activities for *every* archaeological period spanning the Mesolithic through to post-Medieval times. Caves provide unique insights into each period, they fill some of the gaps both in our knowledge and distribution maps, and they highlight avenues of future research potential. Caves have contributed significantly to resolving 'problem' areas in Irish archaeology such as Mesolithic funerary activity; non-megalithic funerary practice in the Neolithic; and unenclosed settlement in Early Medieval times. While this book is devoted exclusively to the subterranean, it is essential to integrate cave archaeology with what was happening aboveground if we hope to achieve as comprehensive an understanding as possible of particular archaeological periods and landscapes.

In Irish archaeological research caves tend to be poorly understood sites and the interpretation of archaeological material from caves is often skewed. One of the most common and enduring misconceptions is that caves were places of prehistoric occupation. For instance, prehistoric human bones, artefacts and metalwork from Kilgreany Cave and Brothers' Cave have been interpreted by various scholars as relating to occupation with little consideration of other possible

alternatives (Tratman 1929, 117, 120–1; Forsayeth 1931, 199–201; MacWhite 1944/5, 127; Herity and Eogan 1977, 193; Herity 1982, 265; Moore 1999, 52). A re-assessment of these two sites has revealed that the prehistoric activities included burial and votive deposition, but not settlement (Dowd 1997; 2002; 2004). In fact, the Late Bronze Age hoards from Kilgreany and Brothers' have been excluded from relevant studies and catalogues (Eogan 1964; 1983), yet these examples are especially significant given the paucity of late prehistoric hoards from Co. Waterford.

An additional issue is that most caves of archaeological significance have never been visited by archaeologists. Consequently, the morphology of sites is often poorly understood which is fundamental to any interpretation of cave use. The term 'burial' is often incorrectly applied to explain the presence of human remains in a cave (e.g. McCafferty 2012), masking the wider range of practices (human and animal) that result in the occurrence of human bones underground. A lack of appreciation regarding the nature and complexity of cave stratigraphy can also result in overly simplistic generalisations about caves, a tendency to date by association, and to cherry pick material from caves to fit particular arguments. To cite one example, to provide parallels for a range of human skeletons of Early Medieval date and Viking artefacts recovered during excavations in Cloghermore Cave, Co. Kerry, Connolly *et al.* (2005, 45–6) formulated a theory that 'caves at Kilgreany and Dunmore and a number of the Clare caves had undoubtedly been used for burial during the ninth-tenth centuries ... The evidence suggests that, as at Cloghermore, the majority of the burials are of local people, but possibly according to a pagan rite'. This assertion was put forward before any of the human bone assemblages from Kilgreany, Dunmore or the Clare sites had received osteoarchaeological analysis, with no supporting radiocarbon dates, and with a poor understanding of the archaeological contexts of the finds. Such erroneous interpretations can then be accepted uncritically and further disseminated (e.g. O'Brien and Comber 2008, 45). Recent work by this writer – which has taken into account the factors not previously considered by Connolly *et al.* – has revealed that the human remains from Kilgreany Cave and the 'Clare caves' are almost entirely of prehistoric date; a small number of artefacts are Viking in nature but there is nothing whatsoever to suggest that they relate to Early Medieval 'local pagan' or Viking burial. Without rigorous analysis, caves become easy subjects of misinterpretation.

SCRATCHING THE SURFACE: RECENT DEVELOPMENTS

Postgraduate research

Twohig (1975) was the first archaeologist to examine Irish caves but

his work, like that of previous scholars from other disciplines, focused on palaeontological questions with virtually no analysis of what the archaeological cave assemblages signified or what human activities they represented. It was not until the late 1990s that there was any concerted attempt – by an archaeologist – to assess Ireland's caves from an archaeological perspective. This resulted in two postgraduate theses: *The Human Use of Caves in the South of Ireland* (Dowd 1997) and *Caves: Sacred Places on the Irish Landscape* (Dowd 2004). These projects involved fieldwork, a detailed examination of unpublished antiquarian archives, recording all artefacts in Irish museums that had been found in caves, and cataloguing the caves of archaeological significance on the island. The data was then drawn together, for the first time, to establish the periods and types of activities at individual sites as well as constructing a picture of the overall patterns in cave usage across Ireland from the Mesolithic through to the Early Medieval period. The 12th century AD was used as a cut-off point because virtually no Medieval or post-Medieval material was apparent in the cave assemblages. However, Medieval mythology and post-Medieval folklore were used to illustrate how caves were perceived in later centuries. This postgraduate work also identified three principal gaps in knowledge in relation to Irish cave archaeology:

- human and animal bones that had been discovered in caves prior to 1990 needed analysis to modern scientific standards
- a greater number of radiocarbon dates were essential, particularly from human bones
- certain artefacts and artefact groups (notably pottery and lithics) from older excavations required modern analysis

Research projects and radiocarbon dating programmes

A series of research projects were subsequently designed to specifically tackle the gaps in knowledge that had been identified by Dowd (1997; 2004). The *Human Remains from Irish Caves Project* (HRICP) was initiated by the author in 2005 to analyse all human bones that had been recovered from Irish caves during non-archaeological investigations – 24 sites in total – using a unique system specifically designed by osteoarchaeologist Linda Fibiger for assessing fragmentary and disarticulated collections (Figure 3.10) (Dowd, Fibiger and Lynch 2006). The *Irish Cave Archaeology Project* (ICAP) was established by this writer in 2010 with IRCHSS funding. The project had three main streams: to obtain 19 further radiocarbon dates on human bones from 12 sites; to commission a series of specialist analyses of artefacts that had been recovered from caves (pottery, lithics, perforated animal teeth, late prehistoric metalwork, Early

Medieval shrine fragments, and Viking artefacts); and to write this book. The radiocarbon dates are published here for the first time and, though the specialist reports will be published in a separate monograph at a future date, some of the results are presented throughout the following chapters.

In 2002 the first project to radiocarbon date human remains from Irish caves was initiated by the author and Peter Woodman; 11 human bones and one animal bone from 11 caves were submitted for analysis. Since then, I have received funding to obtain 34 further radiocarbon dates (including the 19 ICAP dates) on human bones and one date on an animal bone from 21 different caves, including several sites that had been targeted in the original project (Table 3.1). With the 2002 project there was an intentional bias to select samples from caves that contained prehistoric material, but the relatively random process adopted was mirrored in the spread of dates obtained (Table 3.1). The subsequent projects did not involve a bias towards likely prehistoric material, resulting in a similarly wide span of dates. A deliberate attempt has been made with these various projects to select human bones from caves located in various parts of the country. Where multiple dates were obtained from a single site, bones from different individuals as revealed through osteoarchaeological analysis were selected, and/or samples from different spatial and contextual locations within a cave. Both female and male remains were targeted where sex was identifiable, as were bones of infants and children when present.

As a result of the various radiocarbon dating programmes, at least one radiocarbon date has been obtained from every assemblage of human bone from Irish caves with the exception of collections that have been entirely lost. Table 3.1 illustrates that most human bones from caves date to the Neolithic, Bronze Age and the Early Medieval period. The peak of Neolithic and Bronze Age dates had been predicted based on artefact assemblages (Dowd 1997, 174–5), but the Early Medieval dates were unforeseen. The Mesolithic, Iron Age, Medieval and post-Medieval periods also feature, revealing that activities resulting in the occurrence of human bones in caves are common to all archaeological periods in Ireland.



Figure 3.10 Human bones encased in calcite from Killavullen Cave 3, Co. Cork, analysed as part of the HRICP (Dowd, Fibiger and Lynch 2006)

Modern cave excavations (1985–2011)

Sixteen caves in Ireland have been excavated by archaeologists to modern scientific standards over the past 30 years, the results of which have greatly enhanced general patterns in cave usage as well as highlighting the nature and complexity of activities at individual sites (Figure 3.11). Almost all of these excavations were rescue in nature or at least responses to particular problems, rather than being initiated by research questions. Six of the 16 sites investigated produced no archaeological material. For instance, Knockadoon Cave was targeted for research excavations in 1985 because of its central location within the rich Neolithic and Bronze Age landscape of Lough Gur, Co. Limerick. Nothing of archaeological significance was encountered, however (Cleary 1995). The first successful modern archaeological investigation was at Annagh Cave, Co. Limerick (Figure 3.12). A rescue operation was undertaken by the NMI in 1992 after limestone quarrying broke through the cave roof to reveal a series of human skeletons, subsequently dated to the Neolithic. The cave entrance had

been sealed in antiquity and as a consequence, the burials and gravegoods were relatively undisturbed which is extremely rare in Irish cave environments (Ó Floinn 1992; 2011).

Killuragh Cave, Co. Limerick was brought to the attention of archaeologists when the landowner discovered prehistoric lithics while exploring the system in search of fossils. Subsequent archaeological excavations in 1993 and 1996, together with radiocarbon dating, have revealed the cave to be a multiperiod site with activities spanning the Mesolithic through to the post-Medieval period (Woodman 1997). The discovery by cavers of human bones and an iron axe in Cloghermore Cave, Co. Kerry in 1998 led to rescue excavations in 1999 and 2000. Human skeletal remains and artefacts reflecting Early Medieval and Viking activities of an apparently ritual and funerary nature were recovered (Condell 1985; Connolly, Coyne and Lynch 2005). Research investigations were instigated at Fortlands Cave, Co. Kerry in 2000 because of its proximity to Neolithic, Beaker and Bronze Age settlement and ritual activities, but there was no evidence that the cave had been used by prehistoric people (Dunne 2002a).

<i>Project, principal investigator, funding authority, year</i>	<i>No. of sites</i>	<i>No. of dates</i>	<i>Results</i>
<i>Radiocarbon dating of human and animal remains from select Irish caves</i>	11	11 human bones	1 Mesolithic
P. Woodman and M. Dowd		1 animal bone	6 Neolithic
Heritage Council			2 Bronze Age
2002			1 Iron Age
			2 Early Medieval
<i>Dating human bones from Irish caves</i>	11	15 human bones	1 Mesolithic
M. Dowd		1 animal bone	4 Neolithic
RIA Radiocarbon Dates Offer			7 Bronze Age
2004, 2005, 2007, 2009			1 Early Medieval
			2 Medieval
			1 failed
<i>Irish Cave Archaeology Project</i>	12	19 human bones	7 Neolithic
M. Dowd			5 Bronze Age
IRCHSS			3 Early Medieval
2010-2011			2 Medieval
			1 Post-Medieval
			1 failed
Total		47 dates: 2 Mesolithic; 17 Neolithic; 14 Bronze Age; 1 Iron Age; 6 Early Medieval; 4 Medieval; 1 Post-Medieval; 2 failed	

25 sites overall; several sites were targeted on multiple occasions

Table 3.1 Overview of radiocarbon dating projects (not including modern archaeological excavations)

Badhbh's Hole (Ballynamuck Cave 1), Ballynamuck Cave 2, and Ballynamintra Cave Co. Waterford were excavated as part of the *Dungarvan Valley Caves Project* between 2004 and 2014 to address a series of questions about Late Pleistocene Ireland; no archaeological material was encountered (Ó Drisceoil and Jennings 2006; 2009). Research excavations in two caves – Oweyberne Cave 3 and Oweydoe – on Rathlin Island took place in 2004. The former site revealed several phases of Bronze Age activity indicative of shelter or short-term settlement; the latter site was also used for occupation, but in relatively recent centuries (McConkey 2012, 198-208). Archaeological monitoring related to upgrading the lighting system in Dunmore show cave, Co. Kilkenny, again in 2004, led to the recovery of human bones and Viking artefacts. A related radiocarbon dating programme finally

confirmed that the abundant human bones from the site reflected Viking activities; whether they represent a Viking or Gaelic population is still uncertain (Dowd, Lynch and McCarthy 2007). Rescue excavations at Glencurran Cave, Co. Clare in 2004 were prompted by the discovery of a perforated wolf canine and bones scattered over the cave floor. This subsequently developed into a research excavation that continued intermittently until 2009 (Figure 3.13). The site has produced evidence of Bronze Age votive deposition and Early Medieval occupation (Dowd 2007; 2009).

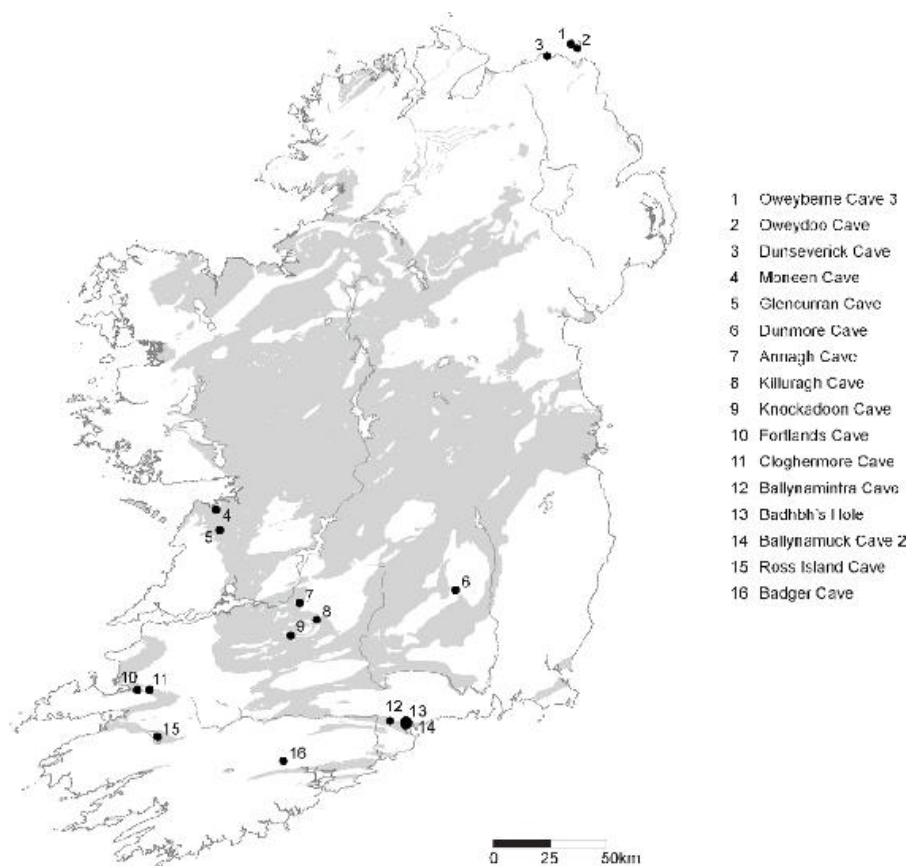


Figure 3.11 Caves excavated to modern archaeological standards

In 2005, Ross Island Cave, Co. Kerry was archaeologically excavated to facilitate a bat conservation initiative. Finds suggest the cave was used as a shelter in the Bronze Age, while Early Medieval material appears to have fallen in from a settlement overhead (O'Brien and Comber 2008). In 2007 and 2008 research excavations at Dunseverick Cave on the Antrim coast revealed evidence of prehistoric and Medieval activities, the latter probably associated with the adjacent

Dunseverick Castle (Logue 2008). Archaeological monitoring and sieving of deposits from Badger Cave, Co. Cork was necessary in 2007 in advance of the construction of a pathway through the cave to facilitate tourist access. Though the cave is located close to Blarney Castle, there was no evidence of *in situ* archaeological deposits but a broken flint flake of probable Neolithic date was retrieved (Dowd 2010; 2014). The most recent cave excavation at the time of writing was in 2011. This was a response to the discovery by cavers of a Bronze Age antler hammerhead and pottery in Moneen Cave, Co. Clare (Casserly and Dowd 2011; Dowd 2013a).



Figure 3.12 Excavation director Ragnall Ó Floinn at Annagh Cave, Co. Limerick, in 1992 (Photo NMI)



Figure 3.13 Marion Dowd and Elaine Lynch during excavations in Glencurran Cave, Co. Clare, in 2008 (Photo Crossing the Line Films)

A significant aspect of the archaeological cave excavations that have taken place over the past 20 years is that most have involved comprehensive radiocarbon dating. Table 3.2 presents a summary of the results from seven sites (no radiocarbon dates were obtained at the time of the Robber's Den excavation; no dates are available for Dunseverick Cave; Killuragh Cave is not included here as dating programmes are on-going). Overall, 75 radiocarbon dates are available from the seven caves: 34 on human bone, 30 on animal bone, nine on charcoal and two on seashells. The results from these excavations reveal that Bronze Age and Early Medieval activities are most pronounced. The Neolithic scarcely features, which contrasts with the results from the radiocarbon dating projects described above. The Mesolithic and Iron Age are virtually invisible, and there is a slightly greater representation of Medieval and post-Medieval activities. The Irish data are broadly similar to that found across the Irish Sea. Of the 287 caves in Britain that have produced human bones, in 50% of cases the dates of the remains are not known. Where human bones have been radiocarbon dated or dated by association (an unreliable but sometimes all too common approach in Britain) they span the Palaeolithic through to the Iron Age (Chamberlain and Williams 2000a; 2000b; 2001).

The greater the number of dates from a site, the more apparent the phases of activity become. At Glencurran Cave 31 radiocarbon dates

were obtained over a period of eight years between 2004 and 2012 (Dowd 2007; 2009; in prep.). Almost all the dates came from the early years of the project and indicated that the cave had been used in the Bronze Age and Early Medieval period which was consistent with the artefacts recovered. However, towards the end of project a small number of radiocarbon dates revealed a Mesolithic horizon (a bear scapula) and human activities of Medieval date (butchered animal bones). These phases had not been previously recognised as there were no associated artefacts or stratigraphy. Thus in this instance, radiocarbon dates alone revealed activities in the cave that were otherwise effectively invisible.

WHY DO ARCHAEOLOGISTS NOT DO CAVES?

The so-called Celtic Tiger economic boom of the first decade of the 21st century led to a proliferation of archaeological excavations in Ireland as a consequence of infrastructural, commercial and residential developments. This upsurge in excavation and the discovery of new archaeological sites is reflected in the number of archaeological licences issued. In 1987, 63 archaeological licences were issued, this rose to 907 in 1999, to 2119 licences in 2003, 2214 licences in 2006, but decreased to 846 licences in 2010 mirroring the economic collapse (Bennett 2000; 2006; 2009; 2013). Thousands of new archaeological sites from all periods have been exposed and investigated as a consequence of developer-driven archaeology. Not one cave, however, has been excavated as a result of commercial developments – primarily because there is little or no overlap between the locations of caves and those of major developments. Here we find yet another reason as to why caves have escaped archaeological attention. Even at a time when there was an exponential increase in the discovery and excavation of archaeological sites of all periods and in all regions, and an unprecedented investigation of every known monument type in Ireland, caves were entirely bypassed. The Celtic Tiger has had no discernible impact on Irish cave archaeology.

<i>Site</i>	<i>No. of dates</i>	<i>Results</i>	<i>Reference</i>
Antrim, Oweyherne Cave 3	3 charcoal	3 Bronze Age	McConcey 2012
Clare, Glencurran Cave	7 human bone 21 animal bone 1 shell 2 charcoal	1 Mesolithic 17 Bronze Age 11 Early Medieval 1 Medieval 1 failed	Dowd 2009 Dowd in prep.
Clare, Moneen Cave	2 human bone 3 animal bone 1 shell	4 Bronze Age 2 Post-Medieval	Dowd 2012 Dowd 2013a
Kerry, Cloghermore Cave	13 human bone 1 animal bone 5 charcoal	19 Early Medieval	Connolly, Coyne and Lynch 2005
Kerry, Ross Island Cave	3 animal bone	2 Early Medieval 1 Medieval	O'Brien and Comer 2008
Kilkenny, Dunmore Cave	7 human bone	7 Early Medieval	Dowd, Lynch and McCarthy 2007
Limerick, Annagh Cave	5 human bone 2 animal bone	1 Mesolithic 6 Neolithic	Ó Floinn 2011
Total	76 dates: 2 Mesolithic; 6 Neolithic; 24 Bronze Age; 39 Early Medieval; 2 Medieval; 2 Post-Medieval; 1 failed		

Table 3.2 Radiocarbon dates from recent cave excavations

Archaeological excavations in caves entail logistical difficulties that are not normally pertinent to open sites and this may be a contributing factor to the lack of archaeological cave research in Ireland. Generators and underground lighting are required; 100% wet sieving is essential; it can be difficult and expensive to obtain insurance cover for subterranean work; health and safety measures may be more complex; excavation costs are generally higher; and some archaeologists are not comfortable working in enclosed underground spaces. These various factors must play a part, even unconsciously, in an archaeologist's decision whether or not to target a cave for excavation. Of the ten caves excavated to modern standards that produced archaeological deposits (outlined above), the majority were small open chambers with varying degrees of natural light. Excavation of deep caves – which would have been used in a different manner in the past – is rare. Generally, work progresses at a slower pace because the confined space inside a cave limits the number of people who can work together underground, yet the quantity of wet sieving that needs to take place outside is greater than on open sites. During the excavations at Glencurran Cave which I directed, for instance, approximately 50% of the team and staff hours were taken up with wet sieving.

Research archaeologists generally approach a site with the objective of answering specific questions. Prior to excavation, a research archaeologist excavating a monument (say, a passage tomb, ringfort or castle) knows generally what period they are dealing with and has an approximate idea of what type of archaeological material to expect.

This is not the case with caves. Assuming there has been some prior indication that a cave is worth excavating, it is likely that multi-period activities will be encountered and that archaeological material will be greatly dispersed. When a disturbed semi-crouched human skeleton was discovered in Moneen Cave at the same level as, and just 1.5m distant from, Bronze Age pottery, the skeleton was (reasonably) thought to be a late prehistoric burial (Figure 3.8). Radiocarbon determinations, however, revealed the remains to be Late Medieval in date (Dowd 2013a). Caves are not ‘reliable’ in that there is usually no clear idea of what, if anything, they contain. Unlike monuments, caves do not offer the security of intelligible results, period-specific data or a guaranteed return for research investment. As described above, of the 16 caves that were excavated to modern archaeological standards over the past 30 years, six of these – or 37% – produced no archaeological material. Funding bodies may be reluctant to support cave excavations unless there is a clear indication in advance as to the date and nature of what a cave contains, and this is not possible for the majority of caves in Ireland.

CAVE ARCHAEOLOGY: IRELAND IN CONTEXT

Despite a late start in this area of scholarship, Ireland is currently to the forefront of cave archaeology research in Europe. All surviving archaeological material from Irish caves, regardless of date, has received comprehensive analysis to modern scientific standards. This is a significant achievement which creates a solid platform for all future cave archaeology studies in this country. In most European countries (and indeed further afield), cave archaeology studies tend to be confined to one period, one region, or one site. In Ireland, by contrast, we now have a relatively coherent understanding of how caves across the entire country were used throughout the duration of human occupation of the island. The remainder of this book will explore that evidence in chronological order beginning with the first colonisers, the Early Mesolithic hunter-gatherers who arrived about 8000 BC, and following through to the population of 21st century Ireland.

Chapter 4

Gathering the Dead the Mesolithic (8000–3900 BC)

Ireland was first colonised by mobile hunter-gatherer groups around 8000 BC based on current archaeological evidence (Bayliss and Woodman 2009). The distribution of Mesolithic material reveals that people were dispersed across the entire country particularly favouring riverine, lacustrine and coastal locations within what was a heavily forested landscape. Over 900 findspots of Mesolithic material have now been documented, the overwhelming majority of which consist of lithic scatters ranging from single artefacts to assemblages of thousands of pieces (Woodman 2012, 5). Stone tools probably represent significantly less than 10% of a hunter-gatherer's life and lifestyle (Warren 2005, 13), but organic remains, settlements and burials of Mesolithic date are rare. Mallory (2013, 69) has estimated that the Mesolithic population of the island could be somewhere in the region of 3000 people. It is these earliest inhabitants that provide the first evidence for a relationship between people and caves in Ireland, a relationship that endured for almost 10,000 years.

Cave occupation in north-west Europe generally declined in popularity following the Upper Palaeolithic, but caves and rock shelters continued to be sought out by Mesolithic hunter gatherers as places in which to carry out domestic and industrial activities. The resultant material from these sites includes hearths, pits, shell middens, animal, bird and fish bones, lithics and lithic debris, coarse stone implements and bone and antler tools (Smith 1992; Stoll-Tucker 1997; Mussi 2001; Cupillard and Perrenoud-Cupillard 2003; González Morales and Fano Martínez 2005; Arias *et al.* 2009; Komšo 2009; Bergsvik and Storvik 2012). Caves were also foci for funerary activities including multiple and single interments, the deposition of disarticulated human and animal bones, and the placement of artefacts with burials (Chamberlain 1996; Conneller 2006; Chamberlain and Williams 2000a; 2000b; Verhart 2008; Schulting and Richards 2002; Schulting *et al.* 2010; Meiklejohn, Chamberlain and Schulting 2011). Against this European backdrop, in Ireland

Mesolithic material has only been recovered from 13 caves (12 with, and one without, lithics) but only five of these sites have convincing evidence that they were used by hunter-gatherers (Figure 4.1). The Mesolithic objects from the remaining eight caves in most instances appear to have been inadvertently introduced into cave strata in much later times by natural or cultural formation processes. It is difficult to extrapolate any meaningful patterns from such a restricted set of sites but some general statements can be made. There is no indication that caves were used to any great extent for habitation or industrial activities during the Irish Mesolithic, though they may occasionally have acted as places of short-term shelter. Some caves were scenes of ritual activities and certain sites were significant places in the landscape that were repeatedly visited over long periods of time.

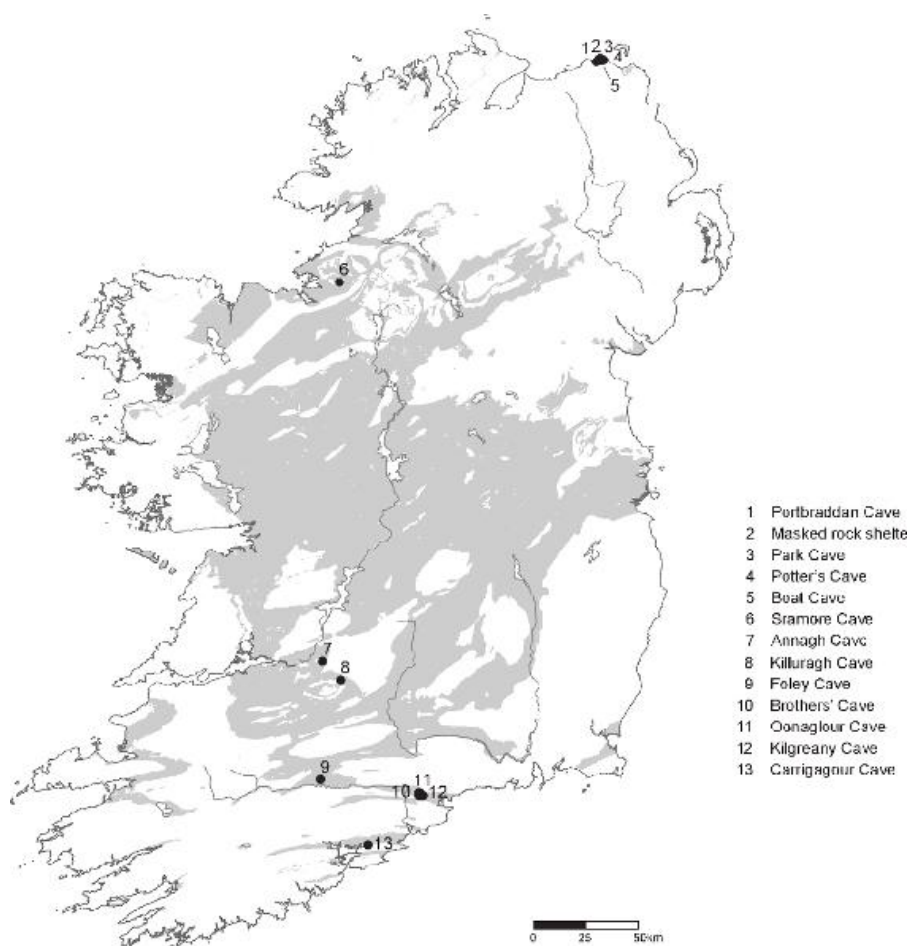


Figure 4.1 Caves with material of Mesolithic or probable Mesolithic date

A decade ago it was claimed that there was no general trend of

recovering Mesolithic material from Irish caves (Delaney and Woodman 2004, 8), but recent discoveries and a re-analysis of old excavation assemblages have indicated the contrary. Considering that this is the longest period in Irish archaeology the paucity of evidence almost certainly points to broader issues. That the majority of caves were investigated prior to 1940 when lithic debitage was not easily identifiable or may not have been considered worth retaining is likely to be relevant. Wet sieving did not take place on early excavations and therefore small objects such as microliths or debitage may have been overlooked – as was the case even as late as 1993 with O'Shaughnessy's excavations in Killuragh Cave (Woodman 1997, 67). This does not explain, however, the paucity of large lithic forms that would have been recognisable to antiquarians. A contributory issue is that caves in Ireland have never been targeted for archaeological investigation with specific Mesolithic research questions in mind. The discoveries that have been made were typically by cavers, landowners and antiquarians. Caves located along river valleys, near the coast, by lakes or close to areas where relevant lithic scatters have been found are likely to repay future investigation.

Another consideration regarding the paucity of Mesolithic cave sites is that some may not have been discovered by hunter-gatherer groups considering both the dense forestation and the low population density. These may have remained hidden until the Neolithic or later times. In contrast, some coastal caves used by Mesolithic people may subsequently have been submerged by rising sea levels. One final consideration is that social or cultural sanctions may have dictated whether or not caves were utilised and if so, for what purposes. In Oman, people avoid caves 'at all costs' because they believe *jinn* or demon spirits reside in them (Rose 2013). Here is an example of the perception of caves as potent supernatural places in the landscape, but without active utilisation there is no associated physical trace and thus an archaeologist might erroneously interpret the absence of material culture as evidence that the caves were of no significance.

JOURNEYING WITH THE DEAD

Human bones of Mesolithic date are known from just seven locations in Ireland (Meiklejohn and Woodman 2012). The significance of natural places – caves, mountains and rivers – is apparent, as is the complexity of funerary rituals including manipulation of the dead; post-mortem processing; the inclusion of artefacts with human remains; and token deposition of unburnt disarticulated human bones. The latter, in turn, implies the practice of excarnation and the circulation of bones. It seems that sometimes hunter-gatherer groups were gathering up bones of the ancestors, travelling around the

landscape with these precious remains, and then depositing bones at special locations such as caves. That two of the seven sites with Mesolithic human bone comprise caves is significant: we could say that over a quarter of known sites are caves. This figure is likely to increase dramatically (particularly considering the British evidence) if caves were specifically targeted to address the current vacuum that is Mesolithic funerary practice in Ireland. If we are to gain any understanding of how hunter-gatherer communities dealt with their dead, directing our focus underground is likely to be fruitful. As it stands, the two sites – Killuragh Cave, Co. Limerick and Sramore Cave, Co. Leitrim – have provided unique insights. They may have been repeatedly visited, possibly on an annual or seasonal basis, as hunter-gatherer groups returned to particular parts of the landscape.

Killuragh Cave presents one of the most intriguing and compelling instances of the importance of certain caves over long periods of time spanning the Mesolithic through to the Bronze Age. The site is one of several small inconspicuous cave passages that penetrate a limestone reef overlooking the Mulkear River; none of the other caves here have yet been investigated. In the 1990s bones and artefacts were discovered in Killuragh Cave by the landowner leading to archaeological excavations in 1993 and 1996 (O'Shaughnessy 1994; Woodman 1997). Approximately 250 human bones were recovered, including three bones of Early Mesolithic date, three of Late Mesolithic date (Table 4.1), four Neolithic and two Bronze Age (see Chapters 5 and 6). A similar span of dates is represented by the artefact assemblage and the faunal remains.

<i>Site</i>	<i>Material</i>	$\delta^{13}C$	<i>Lab code</i>	<i>Measured radiocarbon years (BP)</i>	<i>Calibrated radiocarbon date (2σ) BC</i>
Leitrim, Sramore Cave (Dowd 2008; Kador 2010)	Human, Adult L mandibular M1 molar (possibly male)	-20.4	UBA-15772	5227 $\pm$ 36	4226–3963
	Human, Adult R femur (possibly male)	-20.1	UBA-6407	5202 $\pm$ 39	4224–3951
Limerick, Annagh Cave (O'Flann 2011)	Bear Radius	–	GrA-1719	7670 $\pm$ 60	6633–6433
Limerick, Killuragh Cave (Meekeljohn and Woodman 2012)	Human, Adult metatarsal	-20.86	GrA-2434	8030 $\pm$ 60	7135–6699
	Human, Adult male vertebra	-21.15	GrA-27215	7955 $\pm$ 45	7040–6697
	Human, Adult metatarsal	-19.95	GrA-2433	7880 $\pm$ 60	7029–6694
	Human, Adult maxillary molar	-21.3	OxA 6752	5725 $\pm$ 55	4706–4457
	Human, Adolescent vertebra	-21.5	GrA 27180	5700 $\pm$ 40	4681–4456
	Human, Adult R mandible	-21.9	OxA-6746	5455 $\pm$ 50	4447–4174
Waterford, Kilgreany Cave (Woodman <i>et al.</i> 1997)	Wild pig, Metapodial	-21.2	OxA-4242	8340 $\pm$ 110	7581–7084
	Cow, Tibia	-22.5	OxA-4269	5190 $\pm$ 80	4234–3798

Table 4.1 Mesolithic radiocarbon dates from caves

The span of dates indicates that Killuragh Cave was visited on numerous occasions during the Mesolithic. It may have been a place of gatherings or for enacting rituals. People were plausibly travelling by

boat along the Mulkear River and stopping off to visit the cave to deposit significant material. The river is currently renowned for its salmon stocks and is fished for trout and eel – species that also existed in the Mesolithic. The river must have been important as a seasonal food resource as well as a recognised inland route way. The cave entrance, 140m from the river, is so small that it could not conceivably have served as a visible landmark and is likely to have become overgrown quite quickly. Thus Mesolithic people must have been patently aware of its location, and perhaps other features along the river acted as landmarks signalling the approach to the cave. Once the cave was reached, activities were focused on the larger of the two entrances that lead, via two low narrow passages, into a small cramped chamber. The second smaller passage may have been inaccessible at this time as it silts up quickly (Figure 4.2). Several of the human bones and lithics recovered were heavily weathered suggesting that they had been exposed to the elements on the platform immediately outside the main cave entrance and were then subsequently washed or carried into the cave interior.

The three Early Mesolithic human bones may all derive from the same individual based on osteoarchaeological analysis and an overlap in the radiocarbon determinations (Table 4.1), but equally they may represent three separate individuals. Worthy of reminder is that the majority of human bones from Killuragh remain undated. Ten microliths are associated with this phase of activity – primarily narrow oblique forms that derive from one or a limited number of composite tools (Figure 4.3). Four flint blades of probable Early Mesolithic date were also recovered from the site (Woodman forthcoming). Were hunter-gatherers leaving offerings of stone tools and disarticulated bones of their deceased outside this small dark opening, at what must have appeared as a tunnel into darkness or into another realm? Who were these gifts for? Was the cave visited by groups or by solitary individuals? When and how regularly did visits occur? Did the cave have a name? What stories were told about it? Certainly it was a very special location in early prehistory, emphasised by the ritual activities that took place there over several subsequent millennia.



*Figure 4.2 Killuragh Cave, Co. Limerick – main cave entrance to left
(Photo Sam Moore)*



*Figure 4.3 Early Mesolithic flint microliths and blade from Killuragh Cave
(Photo NMI)*

Following the Early Mesolithic phase, there are no discernible activities at Killuragh for a period of almost 2000 years. Was the cave forgotten during this time or did it continue to be visited as a significant place but without the deposition of material? During the Late Mesolithic, however, hunter-gatherer activities are again apparent, once more culminating in the deposition of disarticulated human bones and lithics outside the main cave entrance. The human

remains from this phase represent at least two adults and one adolescent (Table 4.1). A weathered fragment of a large flint flake was the only artefact recovered that might be contemporaneous. As with the earlier usage, who were these three individuals and why were their remains selected for deposition at the cave? Did they die while the group was stationed in the wider area? Or were their remains carried for lengthy periods of time until a group found itself returning to this part of the landscape?

Killuragh Cave was a focus for the votive deposition of human bones and lithics over long periods of time spanning the Early and Late Mesolithic (no animal bones have so far been dated to the period). There is no evidence for the presence of complete or near-complete cadavers: excavations were extensive and sieving was employed, yet only small quantities of human bones were retrieved and these represented several individuals. This patterning also holds true for the human bone of Neolithic and Bronze Age date from the site (see Chapters 5 and 6) and is broadly similar to evidence from Britain. In English and Welsh caves human bones of Mesolithic date occur mainly in a disarticulated state usually representing just one individual but in some instances up to six. Adults and juveniles are represented, as are females and males, and there is no apparent selective deposition of particular skeletal elements (Conneller 2006, 142–3). At Killuragh Cave remains of adults and adolescents are present but no juvenile remains of Mesolithic date have yet been identified. Conneller (*ibid.*, 154) has noted that in Mesolithic Britain caves of ritual significance do not appear to have been utilised for other activities (Aveline's Hole being a possible exception). The same could be said for Killuragh Cave.

An alternative consideration is that the platform outside Killuragh Cave was used for excarnation. Larger skeletal elements would have been collected and removed to other locations following decomposition of soft tissue, leaving behind small skeletal elements some of which subsequently found their way into the cave system. Support for this lies in the fact that all the identified Mesolithic human bones consist of small skeletal elements. Within the larger undated human bone assemblage there is also a disproportionate quantity of small bones (Fibiger forthcoming). A similar over-representation of small skeletal elements – such as hand and foot bones – from Scottish midden sites including Cnoc Coig, Caisteal nan Gilleán and Priory Midden has been interpreted as evidence for Mesolithic excarnation practices (Meiklejohn and Denston 1987; Meiklejohn *et al.* 2005; cf. Chatterton 2006). Notwithstanding, there was no evidence of carnivore activity on the Killuragh Cave bones which might be expected if the remains were placed unprotected

outside the cave entrance for a period of time. On the balance of evidence, it is more likely that corpses were left to exanimate elsewhere with dry bones being brought to the cave, but where was this original location?

The spread of radiocarbon dates raises the question as to whether Killuragh Cave was rediscovered at various times during the Mesolithic and used for what appear to be similar purposes, or whether traditions may have been passed from generation to generation over millennia about the significance of this location and the types of rituals to be enacted there. The latter scenario is perhaps more convincing considering the similarity in the type of material deposited each time. The cave may have been a familiar stopping point as people travelled through the region at specific times of the year. Groups may have sought to physically link their deceased to places that reflected journeys made during life or undertaken after death. Bones of the deceased were conceivably curated and handled over long periods and may have travelled with the living as they moved from territory to territory. Along the way, collections of bones may have diminished in size as token quantities were deposited at different significant locations in the landscape. Memories or memorials to the dead were all around.

Arguably the most impressive Mesolithic burial in Ireland of the few recorded sites is that at Hermitage (Castleconnell) on the banks of the River Shannon, less than 20km north-west of Killuragh Cave. At Hermitage, an Early Mesolithic cremation of an adult male was placed in a pit together with a polished stone axe, two burnt microliths and pyre debris. The grave was marked with a wooden post suggesting an intention to return. A second pit contained a token deposit of cremated human bone (adult), again of Early Mesolithic date, together with pyre debris. Further stone axes, lithics and activities extending into the Late Mesolithic were also revealed. Another pit with a token deposit of cremated human bone returned a Bronze Age date (Collins 2009; Collins and Coyne 2003; 2006). While there are differences in the treatment of the dead at Hermitage and Killuragh, there are also striking similarities. Both sites are located beside rivers; both display repeat but consistent activities spanning long stretches of time during the Mesolithic; token deposition of human bone is present at both sites; and human remains are associated with stone tools. Furthermore, at Killuragh and Hermitage, Neolithic and/or Bronze Age activities seem to closely mirror the types of hunter-gatherer practices that had occurred millennia earlier. Thus, though seemingly inconspicuous, these natural riverside places appear to have had an enduring significance for populations in much later periods.

The precise location of Sramore Cave is currently not known (*contra* Dowd 2008) and it cannot be located in the field, though it is situated somewhere along the northern side of Sramore Mountain. According to the unpublished records of one of the cavers who investigated the site, the cave entrance measures just $1.3\text{m} \times 1\text{m}$ and leads into a tight narrow passage on average 0.9m high and 0.6m wide (Gilhoys unpublished). In 1995, three human bones were discovered by cavers in a tight squeeze towards the end of the main cave passage, approximately 15m inside the entrance. The bones consisted of fragments of a femur, mandible and humerus that represent one adult, probably male, aged over 20 years at the time of death (Fibiger forthcoming). The femur and mandible have been dated with a very close correlation between the results (Table 4.1) (Dowd 2008, 307; Kador 2010, 12). In the absence of excavation the nature of activities represented by the bones is not clear. The occurrence of large skeletal elements and the representation of different anatomical regions suggest the presence of a complete cadaver. But whether this was a burial, a natural fatality in the cave, or something else entirely is impossible to say at present. The elevated location of the site may have been significant. The part of the mountain where the cave is said to occur commands expansive and panoramic views over an extensive terrain that may have been well-known and well-traversed by the individual whose bones were recovered. This may have been deemed an appropriate place at which to deposit his remains, overseeing the everyday activities and territories of the living.

The radiocarbon results from Sramore Cave indicate that this individual died during the final Mesolithic: 4225–3950 cal BC (95% probability) (Table 4.1). The isotope values reveal a terrestrial protein diet but this does not necessarily imply someone involved in agriculture (*contra* Cooney *et al.* 2011, 666), as both the Early Mesolithic and Late Mesolithic human remains from Killuragh Cave have similar isotopic signatures, and both Sramore and Killuragh are inland sites (see Table 4.1). Recent research has concluded that there is no evidence for an established agricultural way of life in Ireland prior to 3850 cal BC (*ibid.*). However, activities contemporaneous with the Sramore bones have been identified at Magheraboy causewayed enclosure located less than 11km to the west-south-west (Danaher 2007; Cooney *et al.* 2011). Though the early Magheraboy dates are problematic (*ibid.*, 667–8), there is a possibility that the human bones from Sramore Cave represent someone who witnessed early farming activities. Key transitional sites such as this have the potential to reveal valuable information on a poorly understood yet key period in Irish archaeology.

Small quantities of Mesolithic or possible Mesolithic stone tools have been recovered from 12 caves but in several cases the finds do not reflect *in situ* activities. In all instances the relevant artefacts have been retrieved from heavily disturbed strata, usually with no associated contemporaneous material. At Portbraddan Cave (Figure 4.4) on the Antrim coast, an assemblage of 72 flint pieces was discovered during excavations in the 1930s, only a selection of which was retained following excavation. The surviving lithic assemblage represents both Mesolithic and Neolithic activities and includes a heavily water-rolled Late Mesolithic single platformed core from one of the deepest levels in the cave (Layer B) (May 1943; Woodman forthcoming). The underlying stratum (Layer A), the lowest in the excavated sequence, consisted of beach shingle. At least four hearths consisting of small heat-altered stones arranged to enclose fires occurred in this layer at and inside the cave entrance. Associated with the hearths were clusters of unburnt limpet shells (*Patella vulgata*) that had been ‘curiously arranged in conical heaps, shell inside shell, as if someone had amused himself in arranging them into little towers’ (May 1943, 40). Smaller quantities of edible periwinkle (*Littorina littorea*), flat periwinkle (*Littorina littoralis*), common mussel (*Mytilus edulis*), blue-rayed limpet (*Patina pellucida*), dogwhelk (*Nucella lapillus*), great scallop (*Pecten maximus*) and flat topshell (*Gibbula cineraria*) were also recovered (*ibid.*). Animal bones from the lowest levels consisted mainly of pig though analysis has yet to be carried out to determine whether these represent wild boar (*Sus scrofa ferus*), a species that would have roamed the Mesolithic countryside, or the much later domesticated pig.

In the absence of more detailed investigation, there is a tentative suggestion that material from the basal shingle layer in Portbraddan Cave – the hearths, seashells, pig bones and lithics – indicates Mesolithic occupation. The cave would have provided a dry enclosed space, qualities that were availed of during the Early Medieval period when the cave was inhabited (see Chapter 8). During the Mesolithic, Portbraddan Cave could have offered shelter to people on specialised trips to the coast to collect flint nodules that are abundant in the area or to exploit marine resources. Similarly, caves along the west coast of Scotland appear to have functioned as food processing loci during the Mesolithic, when the cave was conveniently located close to shell beds or prime fishing spots that were some distance from the main residential camp (Bonsall *et al.* 2012, 14). In the case of the Nunamiut of Alaska, caves were used for overnight accommodation when on hunting expeditions. Routes purposefully deviated to take advantage of caves allowing a group to progress without the encumbrance of

portable shelter. As the locations of caves remain unchanged, some sites were repeatedly used during specific seasons or for certain activities (Binford 1978). This factor also appears to have influenced the use of caves in Mesolithic Norway: caves are characteristic features in a landscape that are easy to spot and remember, and their whereabouts are easily explained and passed on to others (Bergsvik and Storvik 2012, 22). Portbraddan Cave may also have played a role in sea journeys, as the nearby caves at Ballintoy did many millennia later when fishermen travelling from Antrim to Rathlin Island slept in coastal caves and used them to store fishing equipment (see Chapter 10).

Material from two caves in Co. Cork – Carrigagour and Foley – may represent *in situ* Mesolithic activities but modern excavation is necessary to understand if and how the caves were utilised. Three flint blades and three flint flakes were found in Carrigagour Cave *circa* 1881 together with Early Medieval artefacts, animal bones including dog, hare and pig, and seven different species of seashells – primarily ‘limpet and periwinkle’ (Ussher 1886, 367). At least three of the lithics are of Early Mesolithic date (Woodman forthcoming) (Figure 4.5). Some of the Early Medieval assemblage had entered Carrigagour Cave via an opening in the cave roof and thus it is possible that the prehistoric artefacts were also in a secondary context, particularly as some of the lithics were weathered.

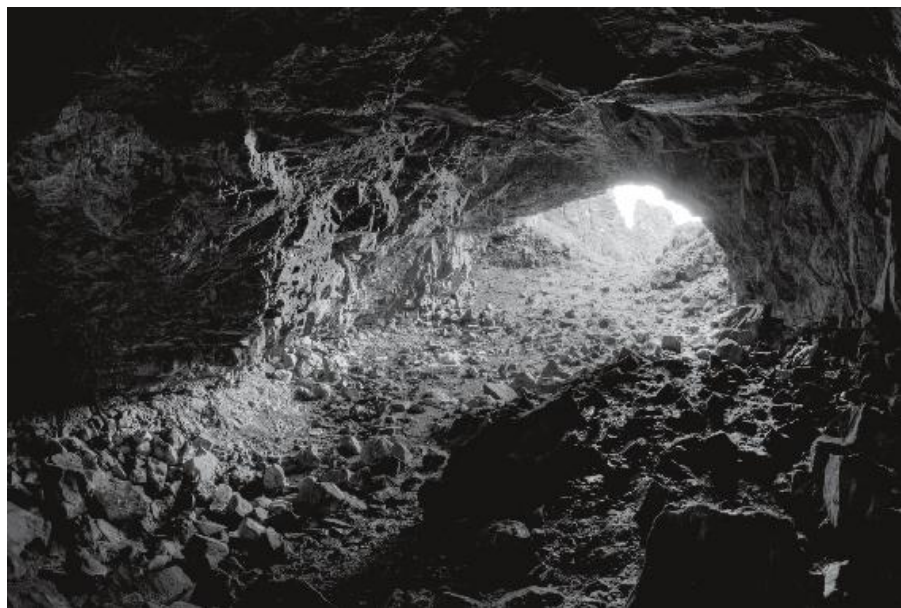


Figure 4.4 Portbraddan Cave, Co. Antrim (Photo Andy McInroy)

Some 40km north-west of Carrigagour, two probable Late Mesolithic flint blades were found in Foley Cave during excavations in 1938 and 1940 (Gwynn *et al.* 1942, 376; Woodman forthcoming). They came from the uppermost stratum which also produced charcoal and animal bones including bear, otter, stoat, hare, pig, bird and fish (Gwynn *et al.* 1942, 376, 380) – all species that existed in Ireland during the Mesolithic (Mallory 2013, 44). The blades are relatively large considering that virtually no flint occurs naturally in this region and thus they were almost certainly brought into the territory from elsewhere (Woodman forthcoming). Foley Cave is one of eight small caves that penetrate the side of a limestone gorge overlooking the Awbeg River, a typical location for Mesolithic camps associated with the exploitation of migratory fish (Anderson 1993, 21). Early Mesolithic flint scatters at Ballynamona and Wallstown some 6.5km north-west of Foley Cave testify to hunter-gatherer activities focused on the Awbeg (Power *et al.* 2000, 2, 785). The river must have been well-traversed by people throughout the period and caves dotted along the gorge may have been noticed and used. At present, however, the lithics from Foley Cave and Carrigagour Cave are not sufficient evidence to argue for intensive or repeat Mesolithic activities such as occupation or industrial activities (e.g. food processing or tool production). They are more likely to represent casual losses or short-term shelter, though it is also worth considering that they reflect some form of deliberate deposition.

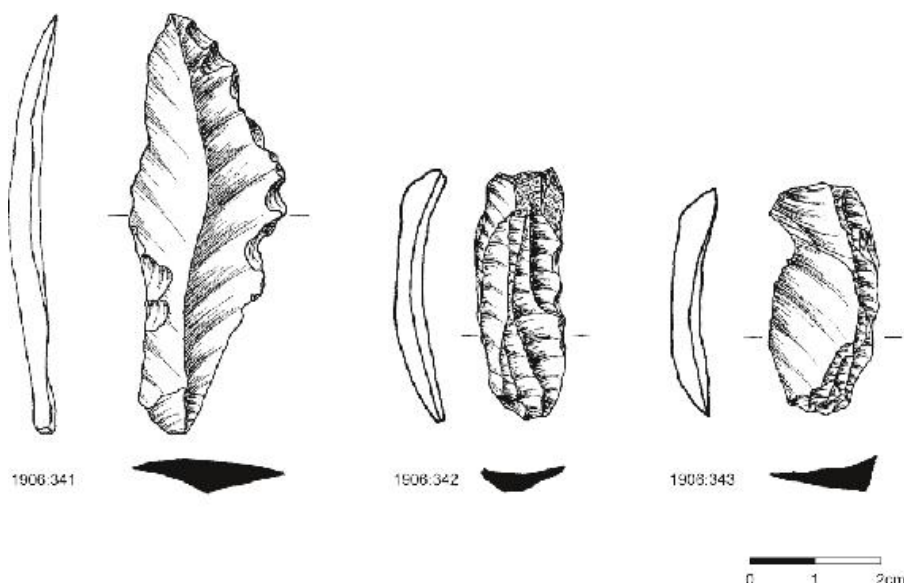


Figure 4.5 Early Mesolithic flint blades from Carrigagour Cave, Co. Cork
(Illustration Malgorzata Kryczka)

Mesolithic artefacts found in a number of Irish caves appear to be intrusive. These objects probably originated from aboveground sites and were introduced into cave sediments in much later periods by natural formation processes or human activities. This is seemingly the case with material from a number of sea caves situated a few kilometres east of Portbraddan Cave. Boat Cave, Potter's Cave, Masked rock shelter and Park Cave currently occur above sea level but are at sufficiently low altitude to suggest that they were probably formed by the sea during the mid Holocene marine transgression or at the beginning of the Late Glacial period and then subsequently modified during the Holocene (Woodman forthcoming). The mid Holocene high relative sea level occurred *circa* 4000 cal BC and thus these caves would not have been available for use during the Mesolithic (*ibid.*). Excavations in the 1930s inside Boat Cave, outside Potter's Cave and at Masked rock shelter revealed these to be multi-period sites with pronounced phases of activity in the Bronze Age and Early Medieval periods (Jackson 1933a; 1934a; 1936a; 1938). A single Late Mesolithic flint butt-trimmed flake was retrieved from each of the three sites. A grinding slab of possible Mesolithic date, similar to Mesolithic examples from Newferry and Dalkey Island, was also found outside Potter's Cave, while a flint blade of Late Mesolithic or Neolithic date was recovered from Park Cave (Jackson 1933a; Woodman forthcoming). In the south-east of the country, an Early Mesolithic flint flake axe fragment (Figure 4.6) from Brothers' Cave, Co. Waterford also seems to be in a secondary location. The surviving bifacially worked flake was so heavily rolled that it must have been subjected to robust marine or riverine abrasion at a location outside the cave (*ibid.*).

CONNECTING WITH FARMERS

There is a tentative suggestion that some of the caves used by Neolithic farming communities for specifically religious purposes had been places of activity in the Mesolithic. While this may be entirely fortuitous – the rediscovery and reuse of the same site entirely unconnected to previous activities – it must also be considered that certain caves were religious foci for Neolithic people specifically because of older associations. Killuragh Cave presents the most compelling evidence (described above) but there are also possibilities in the assemblages from Kilgreany Cave, Co. Waterford, Oonaghlour Cave, Co. Waterford and Annagh Cave, Co. Limerick.

A large weathered flint blade (Figure 4.6) of Late Mesolithic or Neolithic date was found in the inner chamber of Kilgreany Cave (Woodman forthcoming), a site best known for its Neolithic burials (see Chapter 5). The blade came from a stratum that was heavily

disturbed and contained artefacts of Neolithic, Bronze Age, Early Medieval and Medieval date (Dowd 2002, 96). The only potential contemporaneous find was a cow tibia from a layer of tufaceous stalagmite in the outer chamber (Table 4.1). This bone is important as the date spans the transition between the final Mesolithic and earliest Neolithic (5190 ± 80 BP, 4234-3798 cal BC, 95% probability) and suggests the introduction of cattle prior to the adoption of farming and a Neolithic way of life (Woodman *et al.* 1997, 140–1; Cooney *et al.* 2011, 629, 664). While the cattle bone may have entered Kilgreany Cave via natural processes, human activities cannot be discounted. This would have been a relatively exotic creature and its skeletal remains may have warranted special treatment. Similarly, an Early Mesolithic wild pig bone from Kilgreany (Table 4.1) may reflect human activities rather than simply a natural intrusion in the cave sediment. There has been little discussion of ritual, religion and spiritual belief in Mesolithic Ireland (*cf.* O'Sullivan 2002) but growing evidence from elsewhere in Europe has revealed the votive deposition of whole animals, animal parts, disarticulated human bones and stone axes in bogs, lakes and rivers (e.g. Chatterton 2006; Zvelebil 2008, 44–8). Some material from Irish caves – whether human remains, animal bones or artefacts – may reflect similar practices.

Quite close to Kilgreany Cave, a small single platformed blade core (Figure 4.6) that could either belong to the earlier half of the Mesolithic or the Neolithic was discovered in Oonaglour Cave during antiquarian excavations (Forsayeth 1931; Woodman forthcoming). Artefacts and human bones from this site suggest it was a place of religious importance during the Neolithic (see Chapter 5). At Annagh Cave a small flint blade (Figure 4.6), possibly dating to the earlier part of the Mesolithic, and a bear radius of Late Mesolithic date were recovered from amongst a series of Neolithic interments (Table 4.1) (Ó Floinn 2011, 30; Woodman forthcoming). Bears were the largest animals on the Mesolithic landscape and would have been closely associated with caves which they occupied and used for hibernation. Though the Annagh bear is not demonstrably linked to human activities, such an association cannot be dismissed in light of the intensive use of this cave for burial in the Neolithic. Indeed, the Mesolithic bear bone may have been a relic deposited in the cave during that later phase of activity. In sum, the date and nature of activities represented by the lithics and animal bones from Annagh, Kilgreany and Oonaglour are unclear but they raise a slight possibility that certain caves were imbued with significance during the Mesolithic, a perception that was continued and further developed in the Neolithic.

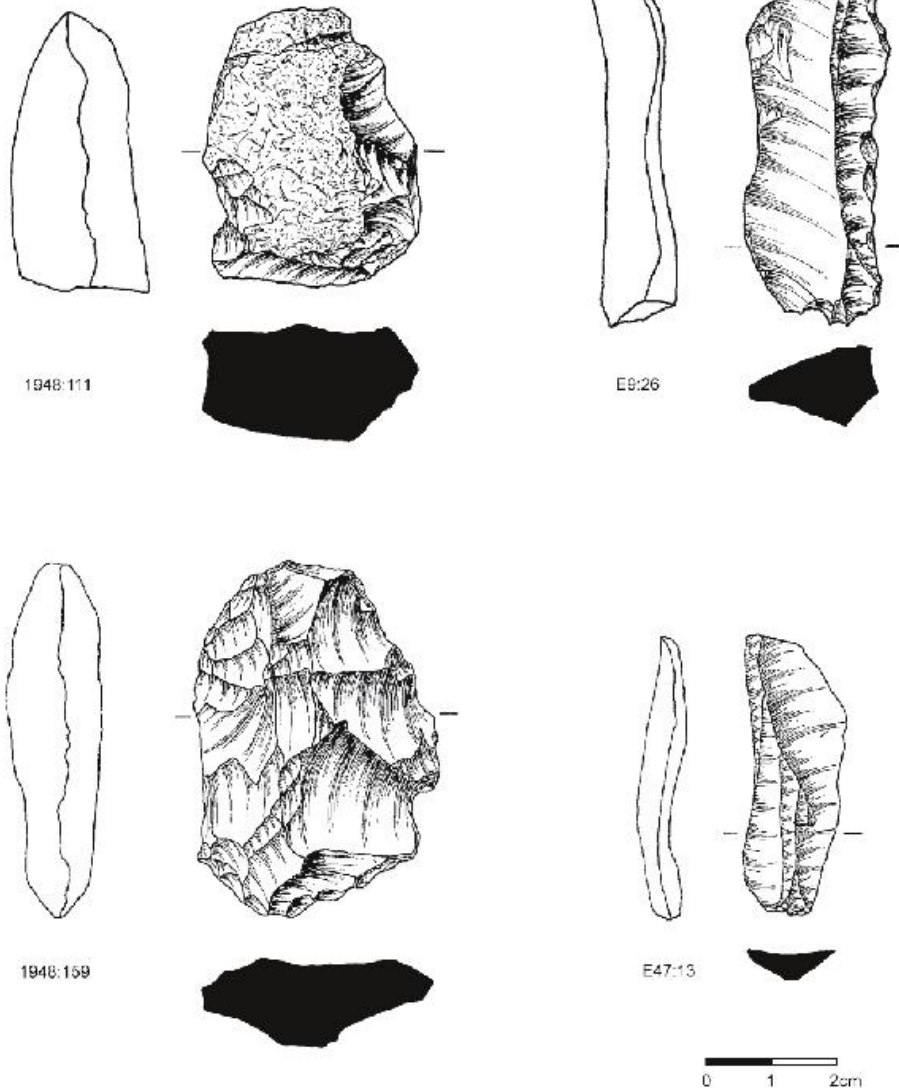


Figure 4.6 Top: single platformed blade core from Oonaghlour Cave, Co. Waterford; blade from Kilgreany Cave, Co. Waterford. Bottom: flake axe fragment from Brothers' Cave, Co. Waterford; blade from Annagh Cave, Co. Limerick (Illustration Malgorzata Kryczka)

MOVING ON

Sramore Cave and Killuragh Cave provide an opportunity to explore why ritual and funerary activities in Mesolithic Ireland are so difficult to identify. Much of the evidence is undiagnostic (disarticulated human bone), ephemeral (small quantities of bone), preserved in special environments (caves), in multi-period contexts (Mesolithic

material mixed with that from later periods), and extensive radiocarbon dating may be necessary (of the 12 radiocarbon dates on human bones from Killuragh, six were Mesolithic). A key challenge is to expand the number of cave sites currently known. One approach is targeted excavation of caves located at places in the landscape that would have attracted hunter-gatherer activities. Apart from the Antrim sites, the caves discussed here are all inland but significantly, most are located close to rivers. Sramore Cave is particularly important and deserves excavation (if it can be found!), as well as caves close to Killuragh Cave. Such concerted research programmes are likely to reward: in Britain 15 of the 20 sites with human bones of Mesolithic date are caves (Meiklejohn *et al.* 2011).

A second approach is to date further human and animal bones from older excavations and non-scientific discoveries, particularly material recovered from deep strata within caves and from caves situated close to areas of Mesolithic activity. More work, for instance, needs to be carried out on the assemblages from Portbraddan Cave and radiocarbon dates are needed for animal bones from sites with recognisable Mesolithic finds such as Foley Cave. As a general rule in Irish archaeology, radiocarbon dating is one of the most important tools in establishing a Mesolithic presence at multi-period sites and for identifying Mesolithic activities from contexts with no diagnostic artefact finds. This is doubly important when dealing with material from caves.

Future discoveries may reveal that caves were important for short-term occupation and shelter as groups moved around the landscape. What is quite clear at present, however, is that caves offer a promising avenue of enquiry in terms of Mesolithic religious life. As we shall see, the adoption of agriculture brought about increased usage of caves for funerary and ritual activities but these practices may well have been rooted in much older traditions.

Chapter 5

Thresholds to Transformation the Neolithic (3900–2400 BC)

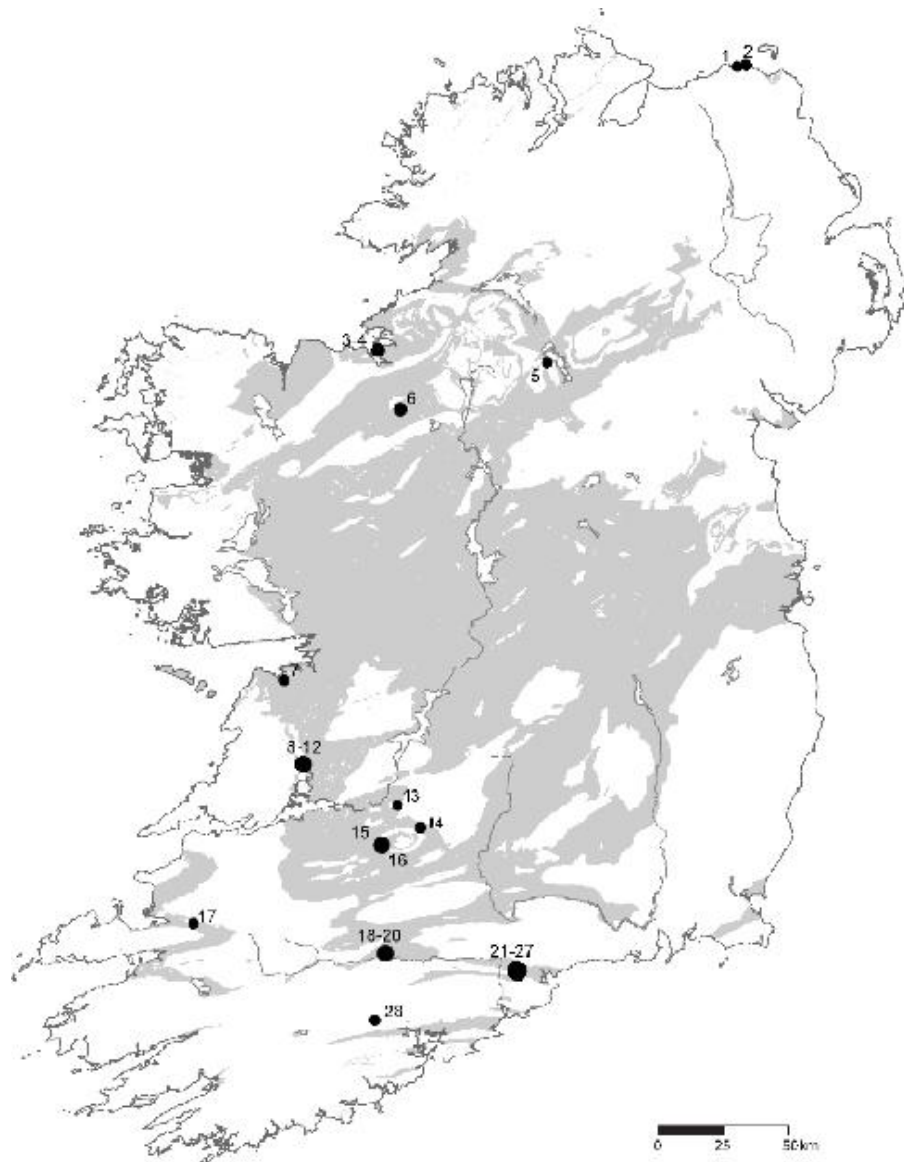
The introduction of domesticated plants and animals, forestry clearance, and the shift to sedentism brought about significant changes in how people interacted with and perceived their surroundings in Neolithic Ireland. Many caves were revealed for the first time in the course of scrub clearance and deforestation. In limestone regions the large-scale quarrying of stone that was necessary for the construction of field walls and megalithic tombs must also have led to the exposure of new subterranean chambers and passages. Agricultural life served to precipitate the discovery of openings that provided access underground. Farming communities had to make sense of this dark silent realm and incorporate it into how they viewed their worlds. The association between caves and the religious dimension of life became particularly pronounced during the Neolithic. Many caves became theatres in which a variety of different rituals were enacted. These were places at which votive material, human bodies and bones were deposited, places that were linked to the dead and the spirit world. Some caves assumed a sacred significance for the first time, while the ritual importance of other sites appears to have been a Mesolithic inheritance. Generally, these caves appear to have been located some distance from settlements and everyday life; secrecy and privacy were plausibly core to Neolithic cave ritual.

NEOLITHIC HUMAN REMAINS

Neolithic material has been recorded from at least 28 caves in Ireland, effectively 31% of the total number of caves of archaeological significance. At the time of writing, human bones of Neolithic date have been recovered from 16 caves located principally in the southern part of Ireland (Table 5.1, Figure 5.1). This distributional bias is almost certainly the product of uneven programmes of antiquarian investigations, and is likely to be redressed by future discoveries and

excavations. Several additional caves may justify inclusion but the archaeological material has been lost or destroyed. Neolithic artefacts have been recovered from a further 11 sites and though human bones have been found at most of these additional sites, so far no Neolithic radiocarbon dates have been returned. In terms of the caves with human remains, two and possibly four sites were used for burial with the placement of crouched and possibly also extended inhumations on cave floors. In terms of the remaining sites, these seem to reflect Neolithic excarnation practices and/or token deposition of small quantities of disarticulated human bone. A number of consistent patterns are evident in the human remains from all but the burial caves:

- usually, only very small numbers of human bones occur – even in cases where a cave has been extensively excavated;
- assemblages represent more than one individual;
- there is often a predominance of small skeletal elements (skulls, for instance, are rare);
- human remains occur inside and close to cave entrances;
- and associated artefacts are few.



- | | | | |
|-----------------------|-----------------------------|-----------------------|--------------------------|
| 1 Portbraddan Cave | 8 Alice and Gwendoline Cave | 15 Grange Hill Cave | 22 Kilquarry Cave |
| 2 Boat Cave | 9 The Catacombs | 16 Red Cellar Cave | 23 Carrigmurish Cave |
| 3 Knocknarea Cave C | 10 Bats' Cave | 17 Cloghermore Cave | 24 Quinlan's Quarry Cave |
| 4 Knocknarea Cave K | 11 Elderbush Cave | 18 Connaherry Cave C | 25 Oonaghur Cave |
| 5 Knocknirry Cave | 12 Bantick Cave | 19 Kilura Cave | 26 Cappagh Cave |
| 6 Plunkett Cave, Kesh | 13 Annagh Cave | 20 Killavullen Cave 3 | 27 Brothers' Cave |
| 7 Monkeen Cave | 14 Killuragh Cave | 21 Ballynamindra Cave | 28 Badger Cave |

Figure 5.1 Caves with material of Neolithic or probable Neolithic date

It is tempting to dismiss such small scattered assemblages as the result of natural formation processes such as flooding or carnivore activities.

However, none of the Neolithic human bones display evidence of animal interference such as gnawing (Fibiger forthcoming) and this patterning is not so strongly represented in assemblages from other periods (e.g. Bronze Age, Iron Age or Medieval). The Neolithic assemblages of human bones seem to speak of deliberate and consistent human activities. Caves were places that received human bodies and bones, and places from which human bones could be removed. Similar processes have been noted for megalithic tombs (Fowler and Cummings 2003, 8).

When the radiocarbon dates on human bones are considered, a distinct clustering between 3600–3350 BC is apparent (Table 5.1; Figure 5.2). There is little to suggest that for the first two centuries of the Neolithic (*circa* 3850–3650 BC) caves were foci of religious activities. This is consistent with Britain where cave burial was rare in the Late Mesolithic and earliest Neolithic, but thereafter the funerary use of caves reached a peak between 3600–3350 BC (Chamberlain 1996; Schulting 2007). Consequently, in both Britain and Ireland it is only after several generations of sedentism and an agricultural way of life that rituals involving caves become prominent. This period of activity broadly correlates with a peak in megalith construction and ‘bursts’ of monument building across Neolithic Europe (Scarre 2010, 178). It also coincides with collective inhumation in British chambered tombs and long barrows, as well as the emergence of Linkardstown-type graves in Ireland (Brindley and Lanting 1989/90; Chamberlain 1996; Schulting and Richards 2002; Cooney *et al.* 2011; Schulting *et al.* 2011). The interrelationship between caves and monuments has received much archaeological attention, but generally from the perspective of how one influenced or replaced the other (e.g. Oosterbeek 1997, 70; Barnatt and Edmonds 2002, 125–6; Dowd 2008, 314; Bonsall *et al.* 2012, 19; Stoddart and Malone 2012, 46–9; Weiss-Krejci 2012, 121–3). However, it may be that caves and monuments were used simultaneously as part of the same rituals: the activities that took place inside caves may have been directly related to what was deposited in monuments and vice versa. Both caves and monuments may represent distinct locations in multiphase and multi-location funerary rituals.

BURIALS IN CAVES

Burial in caves is a common aspect of the European Neolithic (Armendariz 1990; Chamberlain 2012; Chamberlain and Williams 2000a; 2000b; 2001; Leach 2008; Orschiedt 2012; Ribé, Cruells and Molist 1997; Schulting 2007; Skeates 2012a; 2012b; Stoddart and Malone 2012; Tomkins 2012; Weiss-Krejci 2012; White-house 1992; Whittle 1992). In Ireland, just two examples of Neolithic cave burials

are currently known, from Annagh Cave, Co. Limerick and Kilgreany Cave, Co. Waterford.

The remains of five adult males were recovered from Annagh Cave. At least two of the Annagh men were over 55 years old at the time of death which was elderly by Neolithic standards (Ó Donnabháin 2011). No such age or sex biases are evident at Kilgreany Cave where at least five individuals of Neolithic date have been identified. This may have been a familial or kin burial place. Artefacts from both sites are broadly similar to the range of gravegoods found with Neolithic cave burials in Britain, though the high incidence of polished stone axes and arrowheads at British sites is not apparent in Ireland (Chamberlain and Williams 2000a; 2000b; 2001). In northern England, some Neolithic burials were placed in small unroofed cists or in shallow graves cut into cave floors. Occasionally there was deliberate sorting of human bones with skulls and long bones sometimes stacked together or packed into crevices in cave walls (Gilks 1989, 14). Nothing like this has yet been discovered in Ireland.

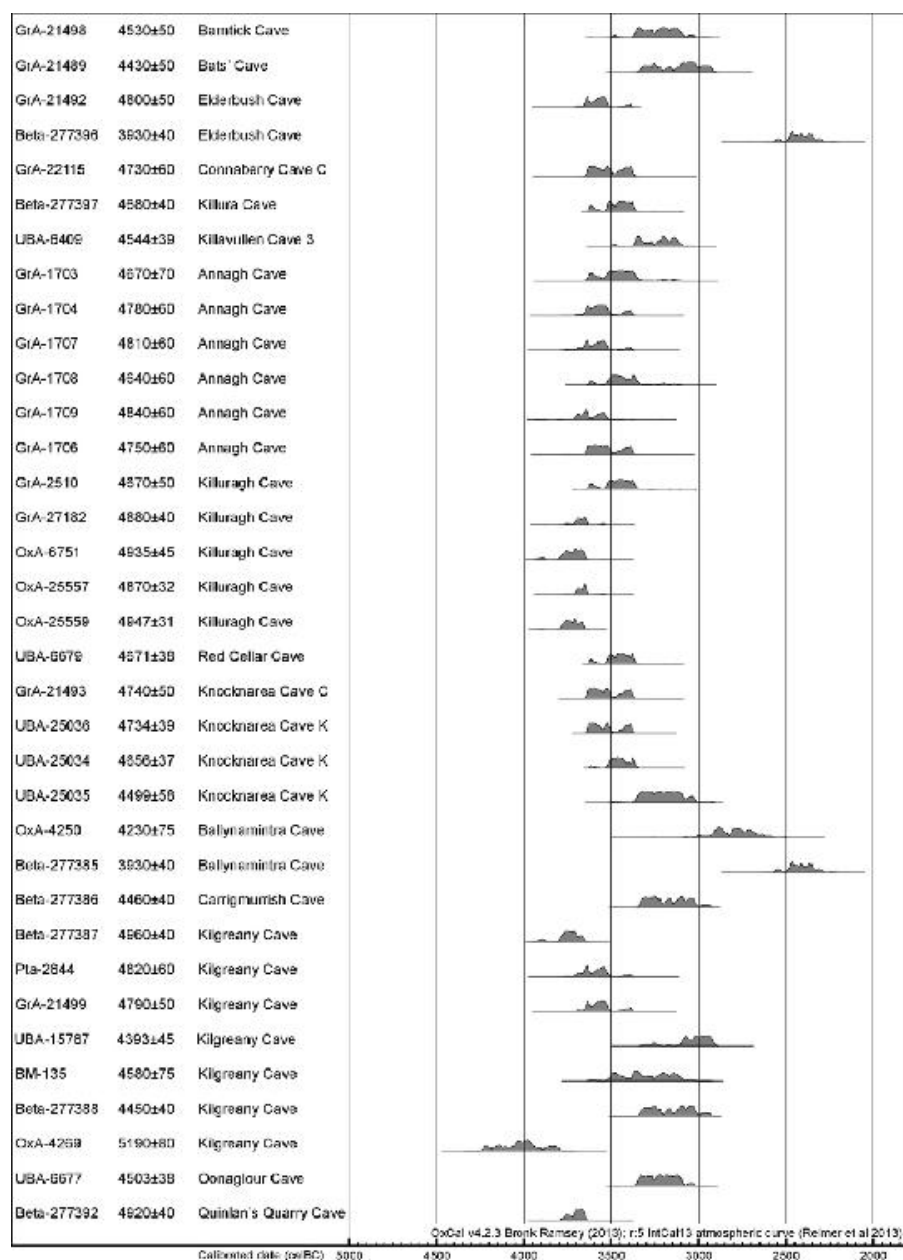


Figure 5.2 Plot of Neolithic radiocarbon dates on human and animal bones from caves

Site	Material	$\delta^{13}C$	Lab code	Measured radiocarbon years (BP)	Calibrated radiocarbon date (Cal) BC
Clare, Bannick Cave (Dowd 2008)	Human, Adult mandible	-21.6	GrA-21498	4530±50	3485–3035
Clare, Bais Cave (Dowd 2008)	Human, Child (<10 yrs) R scapula	-21.8	GrA-21489	4430±50	3335–2920
Clare, Elderbush Cave (Dowd 2008)	Human, Adult pelvis	-21.3	GrA-21492	4800±50	3695–3380
	Human, Adult R metacarpal	-22.5	Beta-277396	3930±40	2565–2295
Cork, Connaberry Cave C (Dowd 2008)	Human, Adult R maxilla	-22.1	GrA-22115	4730±60	3640–3370
Cork, Killura Cave (M. Dowd)	Human, Adult R? Humerus	-21.0	Beta-277397	4680±40	3630–3365
Cork, Killavullen Cave 3 (Dowd 2008)	Human, Adult R ilium (female ?)	-22.7	UBA-6409	4544±39	3370–3100
Limerick, Armagh Cave (Ó Floinn 2011)	Human, Adult male R scapula (1)	-20.85	GrA-1703	4670±70	3640–3140
	Human, Adult male R scapula (2)	-19.75	GrA-1704	4780±60	3660–3375
	Human, Adult male R scapula (3)	-20.13	GrA-1707	4810±60	3705–3380
	Human, Adult male R scapula (4)	-20.63	GrA-1708	4640±60	3635–3125
	Human, Adult male R scapula (5)	-20.95	GrA-1709	4840±60	3765–3385
	Sheep, Humerus	-20.91	GrA-1706	4750±60	3645–3375
Limerick, Killuragh Cave (Dowd 2008; Meiklejohn and Woodman 2012; Peter Woodman pers. comm.)	Human, Adult metatarsal	-22.36	GrA-2510	4670±50	3630–3355
	Human, Adult vertebra	-21.49	GrA-27182	4880±40	3765–3540
	Dog, Mandible	-20.4	OxA-6751	4935±45	3890–3640
	Human, Adult L radius	-21.31	OxA-25537	4870±32	3710–3540
	Human, Adult cranial fragment	-20.99	OxA-25539	4947±31	3785–3655
Limerick, Red Cellar Cave (Dowd 2008)	Human, Adult R talus	-21.9	UBA-6679	4671±38	3625–3365
Sligo, Knocknaren Cave C (Dowd 2008)	Human, Adult occipital	-22.1	GrA-21493	4740±50	3640–3375
Sligo, Knocknaren Cave K (Dowd and Kahler 2014)	Human, Adult ilium	-21.1	UBA-25036	4734±39	3635–3375
	Human, Adult lumbar vertebrae (LV1 or LV2)	-21.1	UBA-25034	4656±37	3620–3360
	Human, Child (4–6 yrs) ischium	-21.7	UBA-25035	4499±58	3370–3010
Waterford, Ballynamindra Cave (Woodman <i>et al.</i> 1997; M. Dowd)	Human, Adult radius	-22.5	OxA-4250	4230±75	3015–2580
	Human, Adult L metatarsal	-22.6	Beta-277385	3930±40	2565–2295
Waterford, Carrigmurish Cave (M. Dowd)	Human, Adult male mandible	-25.0	Beta-277386	4460±40 *	3345–2945
Waterford, Kilgreany Cave (Woodman <i>et al.</i> 1997; Brindley & Laming 1989/90; Dowd 2002; 2008; Meiklejohn and Woodman 2012; M. Dowd)	Human, Infant (6–12 mths) L humerus	-20.9	Beta-277387	4960±40	3910–3650
	Human, Adult male skull (Kilgreany B)	–	Pha-2644	4820±60	3710–3380
	Human, Adult male molar (Kilgreany B)	-21.9	UBA-15767	4303±45	3320–2905
	Human, Adult mandible (male ?)	-21.8	GrA-21499	4790±50	3660–3380
	Human, Adult female, Ribs (86gr) and nine phalanges (14gr) (Kilgreany A)	–	BM-135	4580±150	3635–2925
	Human, Child (10–12 yrs) L mandible	-22.0	Beta-277388	4450±40	3340–2935
	Cow, Tibia	-22.5	OxA-4269	5190±80	4235–3800
	Human, Adult L radius	-21.0	UBA-6677	4503±38	3360–3090
Waterford, Oonaghour Cave (Dowd 2008)	Human, Adult L radius	-21.0	UBA-6677	4503±38	3360–3090
Waterford, Quilnan's Quarry Cave (M. Dowd)	Human, Adult male L femur	-23.0	Beta-277392	4920±40	3780–3640

* Depleted $\delta^{13}C$ ($\delta^{13}C$ values <-25.0 ‰) in the sample indicates that this date needs to be assessed with caution

Table 5.1 Neolithic radiocarbon dates from caves

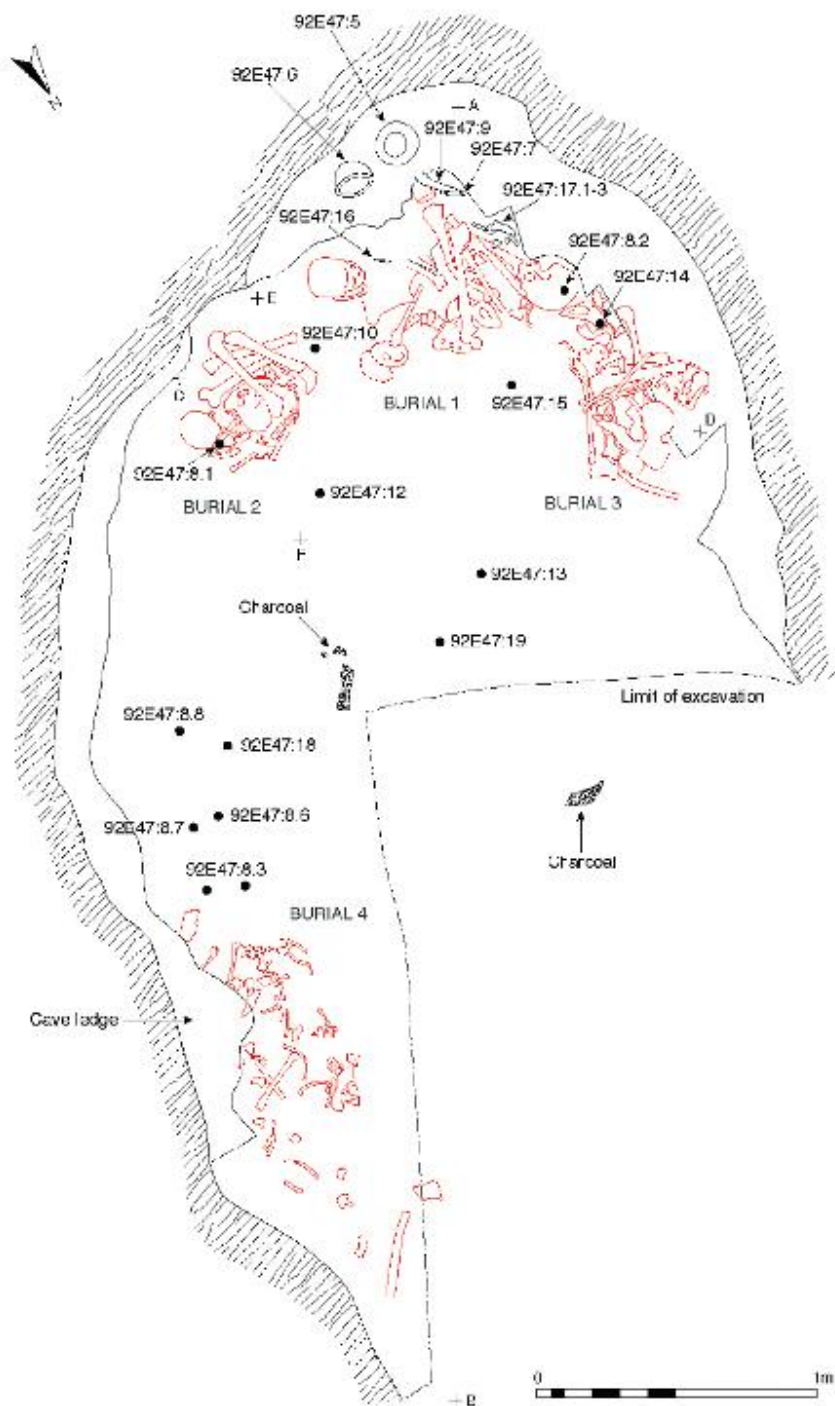


Figure 5.3 Plan of Annagh Cave, with locations of burials and finds (Ó Floinn 2011)



Figure 5.4 Gravegoods from Annagh Cave. Clockwise from left: globular bowl (92E47:6), bipartite bowl (92E47:5), perforated antler tine (92E47:9), bone point (92E47:16), flint discoidal knife (92E47:11), flint/chert blade (92E47:14), flint leafshaped arrowhead (92E47:12), flint blade (92E47:13), bone toggle (92E47:10) (Photo NMI)

Skeletal remains of five adult males were exposed in Annagh Cave during mechanised limestone quarrying in 1992 (Figure 5.3) (Ó Floinn

1992; 2011; Ó Donnabháin 2011). Annagh 1 and 2 consisted of two tightly crouched inhumations. Annagh 3 was represented by a collection of disarticulated bones that had been manipulated to mimic another crouched inhumation. The three individuals had been laid out in an arc against the western and southern walls of the cave, with the feet of one individual close to the skull of the next. The burials occupied a relatively small portion of the available floor space. A number of gravegoods occurred on a natural ledge above Annagh 1 including a decorated bipartite bowl, a decorated globular bowl, a perforated antler tine, a cow tooth and burnt sheep bone (Figure 5.4). A third vessel had fallen off the shelf and had broken over Annagh 1. Other artefacts were associated with specific individuals. A bone point was found with Annagh 1 while a flint discoidal knife, a bone toggle, pottery sherds and hare and pig bones were found with Annagh 2. A flint flake and pig, sheep, cow, bear and wolf bones occurred with Annagh 3 (Ó Floinn 2011, 22, 29). The animal bones were not all necessarily related to or contemporaneous with the human skeletal remains. For instance, a sheep humerus was radiocarbon dated to the Neolithic but a bear radius was of Mesolithic date (*ibid.*, 31).

Neolithic people dropped through the opening in the roof of Annagh Cave and brought into the chamber fleshed corpses, dry disarticulated bones, faunal remains and artefacts. The disarticulated bones of Annagh 3 may have been brought into the cave from an excarnation site or primary burial place aboveground. There was a comprehensive and efficient gathering of bones, yet some of the small skeletal elements were missing. All the small hand bones, for instance, were absent with the exception of two carpals (Ó Donnabháin 2011, 44). That Annagh 3 derived from a location outside the cave is supported by the fact that part of one of the humeri was burnt yet there was no evidence of fires within the cave. Furthermore, approximately 150 small scratches or incisions occurred on the interior surface of the skull and seem to represent post-mortem processing after the head had become skeletonised (*ibid.*, 43). Within the cave, the bones were arranged to resemble a crouched burial by someone who was clearly familiar with human anatomy. This was surely a specialised skill, even if Neolithic people generally had a good understanding of the human skeleton and an ability to recognise particular bones.

Disarticulated bones representing two further individuals (Annagh 4 and 5), both probably male, were recovered from the northeastern part of the chamber. In contrast to Annagh 3, however, only small skeletal elements of these individuals were present; the long bones and skulls were absent (Ó Floinn 2011, 24). This patterning is akin to what one might expect at an excarnation site. Annagh 4 and 5 may reflect corpses that were left to decompose inside the cave – which

might explain the unused space in the centre of the chamber (Figure 5.3). After decomposition, perhaps a year or two later, the larger skeletal elements of Annagh 4 and 5 were plausibly removed to a secondary location aboveground. Annagh Cave was clearly a place of complex and varied multi-phase funerary rituals with the dead treated in a variety of different ways. Bodies and bones were brought into and removed from this cave on numerous occasions. It must have been one of a series of places in the landscape that were connected by mortuary rituals. Several different phases of funerary activity are evident at Annagh: it was a primary burial place, an excarnation site, and a site for the secondary interment of disarticulated remains.

The Neolithic skeletons in Annagh Cave were in a remarkable state of preservation, unique in an Irish context, because the opening into the cave had been sealed after its final usage. It is more usual to find Neolithic bones *ex situ*, scattered through various strata and comingled with material of different ages. Kilgreany Cave is one such example. The stratification and archaeological material was heavily disturbed, not least because the cave had been occupied during the Early Medieval period and again in Medieval times (Dowd 2002). The MNI for Kilgreany Cave is 22; five individuals have been radiocarbon dated to the Neolithic, three to the Bronze Age, and the dates of 14 individuals are presently unknown. The Neolithic individuals included an infant (6–12 mths old), a child (10–12 yrs old), an adult female, an adult male and a third adult (possibly male) (Fibiger forthcoming). There is tentative evidence to suggest that a substantial proportion of the undated skeletal remains are also of Neolithic date.

Approximately 80% of the human bones from Kilgreany were concentrated in the outer chamber of the cave within 6m of the entrance. Several of the burials had been laid out on the cave floor including two tightly flexed crouched inhumations, one of an adult female (Kilgreany A) and one of an adult male (Kilgreany B) (Figure 5.5). Both burials had been placed on spreads of charcoal, yet there appears to have been no evidence of *in situ* burning in this area (Figure 5.6). A large stone slab held down the left shoulder of Kilgreany A (Figure 2.8), while a number of stones covered the skull and upper thorax of Kilgreany B (Tratman 1929). These stone deposits may represent efforts to symbolically restrain individuals (or their spirits) and ensure they stayed in the cave. Artefacts that may represent gravegoods include part of a polished flint axe, a hollow scraper, a flint blade and quartz crystals. Six perforated flat periwinkle shells, two worked pig tusks, two perforated pig tusks, two perforated pig teeth and a perforated dog tooth were possibly worn by the deceased (Dowd 2002).

The disturbed nature of the deposits in Kilgreany Cave hamper

interpretations but what we can say is that this was a place of primary burial for adults, children and infants during the Neolithic. The spread of radiocarbon dates (Table 5.1) reveals that the cave was probably used over several generations or longer, arguably by a particular family who lived and farmed nearby. The cave may thus have been the dwelling place for at least some of their deceased family members. Even taking account of the undated human bones from Kilgreany, it is clear that not all members of a community or family were interred here. Something about a person, their status, or the manner in which they had died must have singled them out for burial in the cave. Not all of the human bones from Kilgreany necessarily represent complete skeletons. Similar to Annagh, it is highly likely that rituals involving the deposition of small quantities of disarticulated human bone also took place associated with, or even distinct from, burial rites.

LINKS WITH THE LINKARDSTOWN TRADITION

Articulated inhumation burials such as those from Annagh and Kilgreany are rare in the Irish Neolithic, though several are known from Linkardstown-type graves. Some of the Linkardstown-type monuments display a concern with the appropriation of natural topographical features. At Ashleypark, Co. Tipperary, for instance, the monument was constructed around a large natural boulder which formed one side of a deep natural crevice into which the burial was placed (Manning 1985, 63; Cooney 2000, 97–9). Adult males figure prominently in Linkardstown-type graves (Cooney and Grogan 1994, 69) providing a strong link with Annagh Cave and its exclusive association with older men. A further point of comparison is the bipartite bowl from Annagh Cave – a characteristic component of the Linkardstown tradition (Ryan 1981; Brindley and Lanting 1989/90). The perforated seashells from Kilgreany are reminiscent of the necklaces of flat periwinkle shells that accompanied two articulated inhumations in a Linkardstown-type grave at Knockmaree, Co. Dublin (Anon. 1836/7; O’Neill 1852/3).



Figure 5.5 Skulls of Kilgreany B (adult male) and Kilgreany A (adult female) (Dowd, Fibiger and Lynch 2006)



Figure 5.6 Artist's impression of the interment of Kilgreany A, by John Murphy (Dowd 2002)

Despite the points of comparison between cave burials and Linkardstown-type graves, there is one pronounced difference: access to the dead. In caves, the dead were laid unprotected on cave floors

and were not placed in graves, covered over or concealed. Even though cave entrances may have been blocked (see below), it was still possible for people to enter caves, access the remains, and see the deceased. This was not the case with Linkardstown-type graves where the dead were permanently separated from the living shortly after burial. The monuments were sealed up and there is no evidence of graves being re-opened or of any physical interaction between the living and the bones of the dead.

THE FACE OF VIOLENCE

The relatively complete nature of several of the skeletons from Annagh and Kilgreany has allowed for the identification of trauma, evidence that is relatively rare from the Irish Neolithic. Kilgreany A, an adult female aged over 25 years at the time of death, had suffered a traumatic injury to the left mandible that had been inflicted by a sharp object during her lifetime (Figure 5.5). The injury had partially healed but continued to exhibit a chronic infection which, for the remainder of her life, would have affected her ability to move the lower jaw when eating or speaking (Dowd *et al.* 2006, 18). A juvenile or adolescent skull fragment of unknown date from the same site bore two unhealed injuries to the back of the head. The wounds were inflicted by an extremely sharp and fine-bladed weapon, possibly from above and/or while the victim was lying on the ground. The injuries were not fatal but the absence of healing indicates that they were sustained around the time of death (*ibid.*, 18). Such trauma can be attributed to large-scale events such as conflict over territorial claims, competition for resources, economic and political stress, but also to smaller scale events such as raids, feuds, one-to-one combat, and domestic violence (Schulting and Wysocki 2005; Novak 2006; Schulting and Fibiger 2012; Fibiger *et al.* 2013).

Cranial injuries were also noted at Annagh Cave. Annagh 2 had been struck on the head by a small blunt object which ‘must have been delivered with considerable force ... probably resulted in some degree of loss of consciousness and perhaps concussion, but the degree of healing observed indicates that they were not fatal’ (Ó Donnabháin 2011, 36). This man had a fractured rib, probably the result of a direct blow to the chest. Annagh 3 had received a non-fatal blow to the head, possibly the consequence of a stone discharged from a slingshot. The nasal bone had been broken and though it had healed, it probably resulted in a deformed nose. The various injuries evident on the Annagh skeletons have led Ó Donnabháin (*ibid.*, 47) to conclude that ‘battle-scarred old men such as these may have been highly regarded in life and may have merited exceptional treatment in death ... the cave at Annagh may have been a specialised locus in the treatment of

the dead'. That a cave was considered an appropriate final resting place for these venerable men reveals that natural places in the landscape were sometimes favoured above interment in constructed monuments. Archaeologists tend to be more impressed by artificial monuments, however. Degenerative joint disease on the bones of two adult males of Neolithic date from caves in the Yorkshire Dales led Leach (2008, 51–2) to tentatively suggest that their placement in caves may have related to their impaired mobility. As with the men from Annagh Cave, however, the joint disease may simply indicate mature men but their placement in a cave could reflect that they were highly regarded.

POSSIBLE CAVE BURIALS

Apart from Annagh and Kilgreany, there are at least two further caves that were possible burial places in the Neolithic. In each case, small numbers of bones were recovered but all major body parts and long bones were present suggesting that these represent disturbed burials.

In 1928, over 65 human bones were discovered in Quinlan's Quarry Cave, Co. Waterford, just over 2km northeast of Kilgreany Cave (Top. files, NMI). The discovery was never recorded or published, the site appears to be destroyed, but the bones survive in the collections of the NMI. Represented in the assemblage is an adult male radiocarbon dated to the Neolithic, an adult female of Middle Bronze Age date, and a child (>5 yrs old) of unknown date (Fibiger forthcoming). In 2003 I spoke to Maureen Shine (née Quinlan) and she recalled hearing about the find as a child. Apparently, while quarrying for stones to build a road, a cave was exposed and the skeletons of two adults and a child were revealed. Mrs. Shine's recollection suggests that originally complete or near-complete skeletons were identifiable to the quarry workers.

A second possible burial site is Killavullen Cave 3, Co. Cork, where 25 bones representing two adult or adolescent individuals were retrieved during excavations in 1934 (Fibiger forthcoming). One individual has been dated to the Neolithic. The remains – 'a human skull together with some other heavily stalagmited bones' – had been discovered on a stalagmite floor in a small inaccessible chamber at the rear of the cave (Top. files, NMI; Martin 1935, 51). A local newspaper reported that a 'skeleton was discovered in a leaning position at the side of the cave' (*The Chronicle* 06/10/1934). These various accounts, though somewhat conflicting, tentatively suggest the presence of a complete or near-complete skeleton.

A third site worth mentioning here is Lisduggan North, Co. Cork. Two inhumation burials accompanied by a Neolithic vessel were found in a limestone quarry in 1946. Records are sparse but it has

been suggested that the burials may have been come from a cave (Cahill and Brindley 2011). Alternatively, a natural cleft or fissure in the limestone may have been used.

TRANSFORMATION UNDERGROUND: EXCARNATION

Caves are ideal locations for excarnation as they provide free circulation of air within a dry protected space. Current evidence suggests that caves were used for excarnation in the Neolithic and possibly into the earlier Bronze Age. These caves were receptacles that housed the newly deceased and allowed the transformation of fleshed corpses into piles of dry bare bones – a transition that may have taken up to one or two years. Following decomposition of the soft tissue, bones were collected from a cave and removed to another location. A typical indication of this short-term phase of funerary activity is the occurrence of small skeletal elements that would have been missed when larger and more visible bones were collected and removed. Usually more than one individual is represented indicating the repeated use of a cave for similar purposes. During excavations in Ballynamintra Cave, Co. Waterford in 1879, for instance, an assemblage of 51 human bones were recovered which comprised primarily of small skeletal elements – teeth, vertebrae, metacarpals, metatarsals and phalanges (Figure 5.7) (Adams *et al.* 1881). This small assemblage of small bones represented four individuals including at least two adults of Neolithic date, one adult of Early Bronze Age date, and an undated child (<10 yrs old) (Fibiger forthcoming). This site may have been a recognised and designated place for excarnation over many generations. Bones that were removed from sites such as Ballynamintra Cave were subsequently deposited or buried at a secondary location. At these secondary sites, human bone assemblages may comprise principally of larger bones with a distinct under-representation of small skeletal elements. Megalithic tombs may have been one such secondary burial place. However, the almost complete absence of megalithic monuments in the south of Ireland where the relevant caves occur suggests that other natural places such as rivers, lakes or the sea may have been the secondary place of deposition for human bones that had been recovered from excarnation caves. Another variant of this practice is evident at Annagh Cave, Co. Limerick where one individual was represented by disarticulated bones that may have been recovered from an excarnation site outside the cave (see above).

A study of funerary customs in 1970s rural Greece reveals the complexity of the intermediate stage between death and final deposition (Danforth and Tsiaras 1982). The deceased were buried in graves in communal cemeteries. Bodies were exhumed after they had

been in the ground for three, five or seven years. Men dug open the graves but almost all subsequent rituals were conducted by women. After exhumation, the family, neighbours and friends discussed the state of the recovered bones. If parts of a corpse had not fully decomposed, explanations were necessary and usually centred around the moral character and conduct of the deceased. Where decomposition of the soft tissue was complete, the skull was removed from the skeleton and wrapped in white cloth. Other skeletal elements were then placed in a metal box, with great care taken to recover all the small hand and foot bones. The skull was added to the box only after the other remains had been collected. A priest recited part of the Orthodox funeral service before the box was placed in an ossuary (*ibid.*, 15–22, 49–50). What this ethnohistorical example highlights is the importance of the excarnation and subsequent exhumation process, and also the many years involved between death and final deposition. Did Neolithic people similarly examine and comment on the dry bones of their deceased when they collected them from caves? Did the dead reside in these caves for several years? Where did the bones go afterwards?



Figure 5.7 Ballynamintracave, Co. Waterford (Photo Thorsten Kahlert)

POWERFUL ENCOUNTERS WITH THE DEAD

A notable feature of the caves that were used for excarnation is that

they are small, often narrow and cramped, sites. It appears that corpses were laid out on cave floors and may have been fully exposed to view as there is no evidence that bodies were placed in pits or covered. This feature has also been noted with cave burial in Britain (Schulting 2007). In Ireland, osteoarchaeological analysis has revealed an absence of animal scavenging marks, which suggests that cave entrances were sealed while decomposition of the soft tissue took place (Fibiger forthcoming). This reveals a conscious decision *not* to speed up decomposition, in contrast to outdoor excarnation sites where carnivore and carrion activities can reduce a fleshed corpse to a pile of bones in a matter of weeks or months (Smith 2006, 681). By creating a protective environment in which excarnation took place undisturbed, people controlled the process, pace and space. The living may have sought to observe the slow and gradual disintegration that was taking place inside a cave. The underground was therefore a place of transformation, which in turn transformed caves as places. It may have been in caves that the journey into the spirit world commenced.

The morphology of the identified excarnation caves suggests that there would have been very close physical interaction between the living and the dead – indeed this level of physicality may have been desired. To illustrate this point it is worth examining one cave that was used for excarnation. Knocknarea Cave K is located towards the summit of Knocknarea Mountain, Co. Sligo (Dowd and Kahlert 2014). A small assemblage of human bones recovered there in 2013 and represent two individuals – an adult and a child (4–6 yrs old), though they were deposited in the cave at different times during the Neolithic (Table 5.1). Typically, only small skeletal elements remained in the cave with a notable absence of large skeletal elements (Figure 5.8). A relatively arduous journey was required to carry corpses up the mountain. When the cave was reached, it would have required effort to push or drag a corpse through the tight entrance opening (Figure 5.9). Once inside, where it is not possible to stand upright, it would have been an awkward and difficult task to drag the corpse along the cave floor. There were easier ways and more accessible places in which to leave a cadaver to excarnate. But this cave was deliberately sought out (and possibly also some of the other 25 caves on this mountain. At least one of these, Knocknarea Cave C, also produced human bone of Neolithic date – Table 5.1).



Figure 5.8 Human bones from Knocknarea Cave K, Co. Sligo representing one or two adults (30–39 yrs old) and one child (4–6 yrs old) (Photo Thorsten Kahlert)

Why did people seek out places like Knocknarea Cave K where an intense level of physical contact between the bodies of the living and the bodies of the dead was to be expected? Such close interaction may have been part of the mourning process or funerary rituals. It may have also served to strengthen the ties between living and dead. After the initial deposition, caves continued to provide private enclosed spaces for the living to interact or meet with the dead. It may have been important for certain people, such as family members or ritual specialists, to witness the gradual disintegration of the deceased. This may have been a physical manifestation of their departure from this world and transference into the spirit world. Caves were possibly visited at regular intervals, not least to inspect the decomposition process and to assess the appropriate time at which to remove dry skeletal remains. Restricted space meant there was no escaping the sight of decomposing corpses and the pungent odours, experiences that would have been particularly vivid and emotive in the dark. Studies in environmental psychology reveal that people need more

interpersonal distance when indoors. The need for personal space is felt more acutely in small spaces, increases further in darkness, and further still in narrow places (Mlekuž 2011, 5). Taking these points into consideration, it is likely that spending time inside confined dark narrow caves, in close proximity to decomposing human cadavers, would have greatly precipitated feelings of discomfort and anxiety, while also heightening physical and sensory awareness. These were powerful encounters.

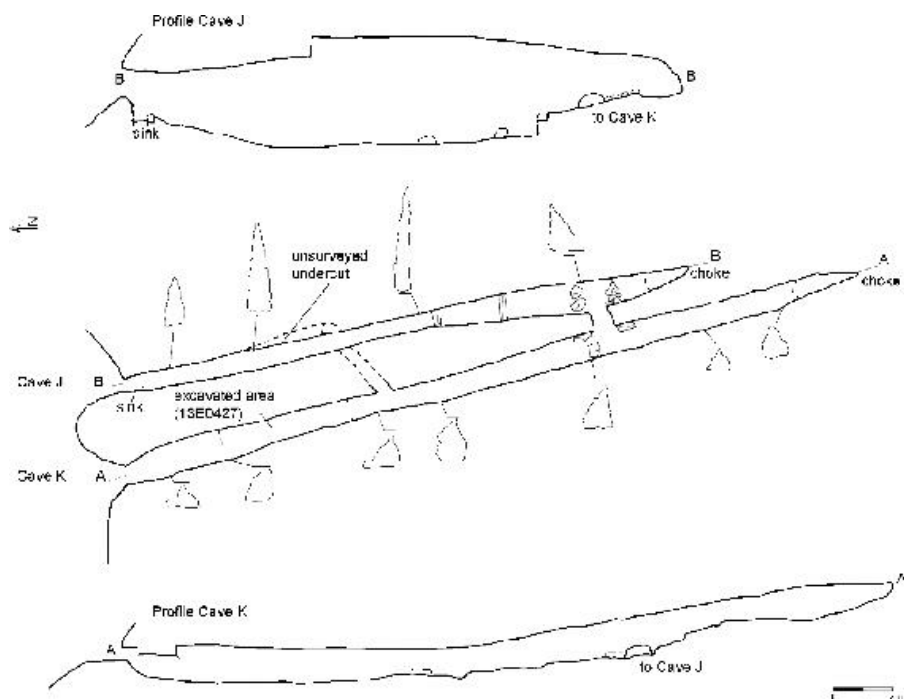


Figure 5.9 Plan of Knocknarea Cave K (Illustration Thorsten Kahlert)

The living may also have actively engaged with excarnation and the associated transformation. Generally, Neolithic lithics are extremely rare in Irish caves, but with one exception: scrapers (Figure 5.10). Convex and concave (hollow) scrapers have been found at several caves which also contained Neolithic human bones, though admittedly it is currently not possible to provide a definitive link between the two and some of the convex scrapers may be of Bronze Age date. Hollow scrapers have been recovered from Killuragh Cave, Co. Limerick and Kilgreany Cave. Convex scrapers are known from three neighbouring caves in Co. Clare – the Catacombs, Alice and Gwendoline Cave and Elderbush Cave (though some of these can no longer be located). One plausible explanation for the recurrence of scrapers is that they were used to hasten the excarnation process. While none of the human

bones from caves display cutmarks, it is also necessary to remember that the relevant skeletal elements that might display evidence of dismembering or defleshing do not survive in cave assemblages. The assumption is that these larger skeletal elements were removed to secondary locations. At Carsington Pasture Cave, Derbyshire, multiple cutmarks on two femurs of an adult of Late Neolithic or Early Bronze Age date are consistent with dismemberment of the body at the knee joints (Chamberlain 2001). This implies close physical engagement between the living and the dead.

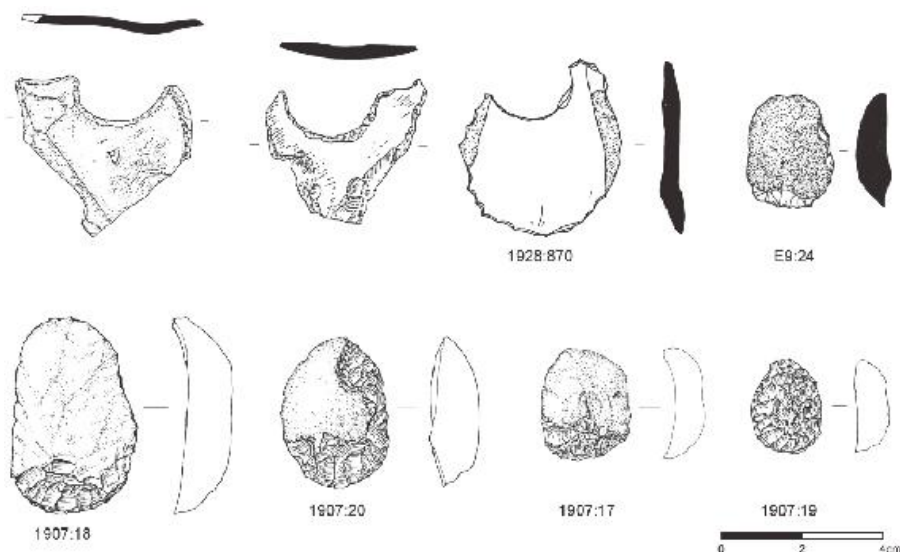


Figure 5.10 Two hollow scrapers from Killuragh Cave, Co. Limerick (Illustration NMI); hollow scraper and convex scraper from Kilgreany Cave, Co. Waterford (Dowd 2002); four convex scrapers from the Catacombs, Co. Clare (Illustration Eavan O'Dochartaigh)

ARTIFICIAL CAVES AND NATURAL TOMBS

Antiquarian R. A. S. Macalister (1921, 351–9) divided prehistoric burials into three categories: cave burials, artificial cave burials (megalithic sites with a subterranean chamber), and burials in artificial caves aboveground (a cist or chamber on the ground surface). What is interesting about this now outdated classification scheme is that it highlights the perceived close relationship and sometimes blurred division between caves and megalithic tombs, an aspect that has featured in recent research (e.g. Bradley 2000; Barnatt and Edmonds 2002). Modern academic nomenclature can be vague and inconsistent when describing caves, artificial cave, and monuments with subterranean chambers (e.g. Stoddart and Malone

2012). Some archaeologists have suggested that megalithic monuments, particularly passage tombs, may reflect an intention to recreate the sensory experiences available in caves, essentially the darkness, silence, stillness, and constant temperature (Oosterbeek 1997; Dowd 2008; Bjerck 2012; Mlekuž 2012). Such monuments, therefore, may have been viewed as artificial caves. Another viewpoint, suggested by Schulting (2007, 588–9), is that the lack of continuity between Mesolithic and Neolithic cave burial in Britain should be taken as evidence that caves did not inspire the construction of megalithic tombs, but rather that megaliths may have inspired the use of caves for burial. It has also been argued that caves were inferior substitutes for megalithic tombs (Schulting *et al.* 2010), and that monuments were constructed in areas where caves do not naturally occur (Weiss-Krejci 2012).

A shared feature of megalithic monuments and caves is the controlled and structured use of space. Though caves were not constructed, certain types of caves *were* deliberately selected in the Neolithic, specifically narrow caves with passages usually just wide enough for one person to move through. Travelling into the passages and chambers of some megalithic tombs closely resembles the experience of moving through narrow caves, and generates the same sense of being enclosed underground. There is a heightened sense of moving into another realm, and feelings of unease or claustrophobia may arise. It is necessary to crouch and stoop in certain areas, the body comes in contact with the walls, movement is deliberate and slow, and only one person can progress at a time. Reaching the end chamber of a cave or megalithic tomb signals the end of the solitary aspect of a journey, and here it is possible to re-group in instances where several people are inside. Restricted space in caves and tombs not only dictates movement, but also impacts upon knowledge, experience and participation in rituals (Bradley 1993, 26). The shared architecture of caves and tombs therefore ‘imposes a certain order to the way in which deposits are encountered, keeping some things hidden until the entrance and the natural light it allowed in has disappeared’ (Barnatt and Edmonds 2002, 125).

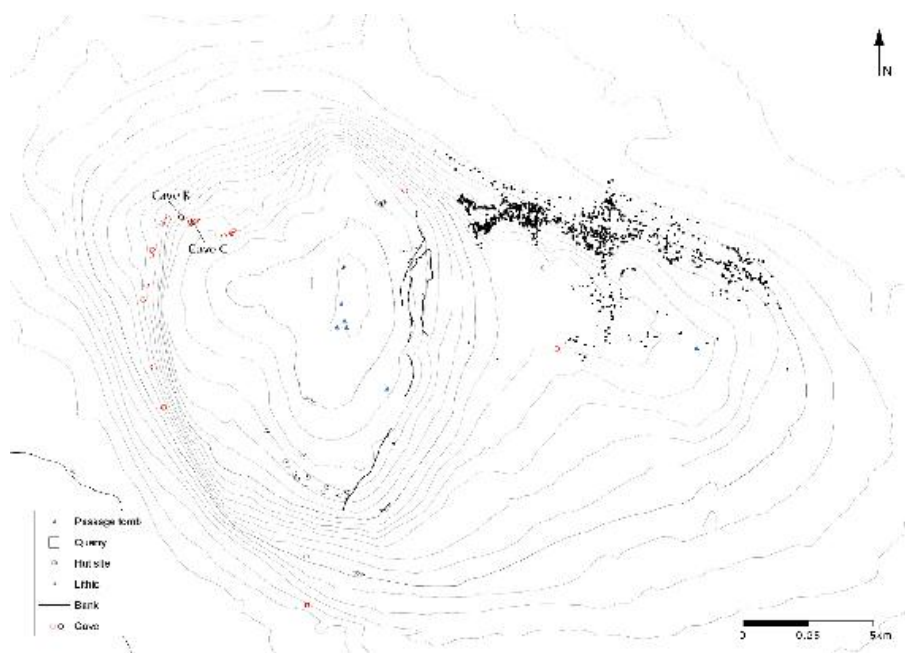
Increasingly, however, I am of the opinion that Neolithic people *did* recognise a distinction between natural caves and artificial monuments, and I believe that this distinction was maintained in terms of usage and perception. When caves and monuments ceased to be actively used or constructed, only then did the boundaries become blurred. This argument finds greatest support where there is a close proximity between caves and megalithic tombs. In Iberia it has been possible to trace regional relationships in the contemporaneous use of caves and megalithic tombs for burial and ritual activity (Ribé *et al.*

1997). In Neolithic Britain the use of caves and mortuary monuments overlaps chronologically and spatially in regions such as southern Wales, western Scotland, and northern England (Schulting 2007). In the Mendip Hills, Somerset, the movement of human bones in and out of caves during the Neolithic may mirror the contemporaneous manipulation and circulation of human remains in barrows (Lewis 2011, 50). Lewis has argued that four Neolithic henge-type enclosures – The Priddy Circles – were constructed in a particular part of the Mendips because of the high density of swallets (closed natural vertical shafts) there (*ibid.*, 53). In Ireland the best place to test the hypothesis is in Co. Sligo where caves occur within the passage tomb complex of Carrowkeel-Keshcorran, and on Knocknarea Mountain where several megalithic tombs are located on the summit. It is likely that caves and megalithic tombs were both utilised at different stages of multi-phase funerary rituals. Apart from a small quantity of cremated human bone of unknown date from Annagh Cave (Ó Floinn 2011, 27), all the human bones of Neolithic dates from Irish caves are unburnt. This contrasts with passage tombs and court tombs where cremated remains dominate human bone assemblages (Cooney and Grogan 1994, 69). It is likely that in some instances bodies were left to ex-carnate in caves with the dry bones later transferred to monuments, or cremated and then deposited in megalithic tombs. The presence of calcite on human bones from long cairns at Ascott under Wychwood, Oxfordshire and Parc le Breos Cwm on the Gower Peninsula reveal that skeletons had lain exposed on cave floors for some time before being removed for final deposition in the cairns (Barnatt and Edmonds 2002, 114). A study to examine all unburnt human bones from Irish megalithic tombs specifically for calcite deposits may reveal similar connections.

At Carrowkeel, 15 passage tombs and seven caves share an upland setting in the Bricklieve Mountains (Hensey *et al.* 2013, 8). A large swallowhole known as Pollnagollum is centrally located within a general northwest – southeast band of seven passage tombs. In another part of the complex, a small cave is located just 165m directly northwest and downslope from another passage tomb (Cairn B). The physical proximity between monument and cave would not have been lost to Neolithic people. At Knocknarea Mountain – approximately 25km northwest of Carrowkeel – five passage tombs were constructed on the summit (dominated by the impressive cairn known as *Miosgán Maedbh*), and 26 small caves penetrate the north-western slopes of the mountain (Figure 5.11). Human remains of Neolithic date have been recovered from two of these caves and, as discussed above, at least one seems to reflect excarnation processes. Perhaps at Knocknarea the passage tomb cairns with their artificial caves represent miniatures of

the mountains with their numerous natural cave passages.

Archaeologists are naturally drawn to the monumental and this may adversely impact upon our appreciation of natural places and just how significant they may have been to Neolithic people. We are sometimes over-eager to ‘megalithicise’ caves and natural rock formations. For instance, O’Sullivan (2001, 91) suggested that Annagh Cave may have been ‘a deliberate attempt to recreate the image of a Neolithic passage tomb, rather than being a burial “in nature”’. This is unlikely considering the morphology of Annagh Cave: a small oval chamber with no passage and entry via an opening in the cave roof. There are also almost no points of comparison between Annagh and passage tombs in terms of funerary rites and material culture. Finally, apart from blocking the entrance, no attempts were made to construct or modify the natural cave, no efforts to build something new. Another probable natural topographical feature – Cahirguillamore, Co. Limerick (see below) – has similarly been described as ‘an imitation megalithic tomb’ (Hunt 1967, 30). Jones (2007, 173–4) has suggested that this site was appropriated by Neolithic people as a megalithic structure.



*Figure 5.11 Caves and Neolithic sites on Knocknarea Mountain, Co. Sligo
(Illustration Thorsten Kahlert)*

What is ignored at both Annagh and Cahirguillamore is that megalithic tombs are rare and not a significant part of religious

traditions in the southern part of Ireland during the Neolithic, so why would communities in this region try to megalithicise natural landscape features? Should we not consider that prehistoric people perceived caves and natural rock features as highly charged potent places in their own right, and not the poorer relations or imitations of megalithic tombs? Since the 19th century, the tendency to overplay monuments and underplay natural features in archaeological research has resulted in an imbalanced understanding of the different places and stages involved in Neolithic mortuary practices. At places like Knocknarea Mountain, however, we find a close connection between caves and passage tombs, but distinctions were also maintained as to how each was used. Natural places are likely to have resonated with meanings that were different to those associated with megalithic tombs, but both were recognised as ritually significant.

THRESHOLDS

The Neolithic material from Irish caves almost always occurs in the daylight zone and typically no more than 15m inside cave entrances. There is nothing to indicate that Neolithic people ventured deep inside caves. This reluctance may indicate a perceived association between the deeper dark zones of caves and the spirit world. Cave entrances were plausibly of immense symbolic importance, marking the liminal point between the outside world of the living and the inside world of spirits and the dead. The threshold is particularly pronounced at narrow passage-type caves which have correspondingly narrow and low entrances, usually less than 1m wide. By crossing the entrance, daylight is obscured resulting in immediate immersion into darkness. This type of cave was deliberately and repeatedly sought out for funerary activities during the Neolithic – and possibly specifically for excarnation rites. These passage-type caves may have been seen as physical representations of the spiritual passage from life into death (e.g. Knocknarea Cave K, Knocknarea Cave C, Barntick Cave, Bats' Cave, Elderbush Cave and Killavullen Cave 3). The time that the deceased lay in a cave may have been equivalent to a particular stage of the journey into the spirit world.

The measures taken to block cave entrances (as evidenced by the absence of scavenging marks on human bones) not only deterred wild animals from crossing threshold, but also discouraged casual visitors and served to 'contain' the spirit world. At Annagh Cave a large limestone slab sealed the roof opening that provided access into the cave (Ó Floinn 2011, 18). The entrances to Dowel Cave and Raven Scar Cave in the north of England had been blocked in a similar manner following the deposition of a series of Neolithic burials (Gilks 1989, 14). At Killuragh Cave, Co. Limerick, a dog was buried beneath

a layer of stones at the main cave entrance during the Neolithic – perhaps a different way of fulfilling the same function as blocking slabs. Disarticulated human bones representing one or two individuals of Neolithic date were found inside Killuragh Cave (Table 5.1).

In Ireland there is no indication of Neolithic modifications to caves, and speleothems and underground water are absent from virtually all sites – a consequence of the deliberate selection of small relict caves. Elsewhere in Neolithic Europe, images were painted on cave walls, stone structures were built, chambers were enlarged by rock cutting, and ritual activities were focused on underground pools, lakes and speleothems (e.g. Whitehouse 1992; Barnatt and Edmonds 2002; Skeates 2010). A small number of Irish Neolithic cave sites (e.g. Brothers' Cave and Oonaghlour Cave, Co. Waterford) are decorated and contain underground pools but there is no corresponding concentration of Neolithic material. These deeper and dark recesses were probably never explored.

Only occasionally were features inside caves given special attention. At Bally-namintra Cave a white calcareous deposit of moonmilk, located 12m inside the entrance, seems to have taken on significance for Neolithic people: 'in and upon it was found the greatest assemblage in the cave of human bones and other traces of man though it was not more than 2ft. 6in. [0.76m] from the roof' (Adams *et al.* 1881, 188). The white moonmilk must have stood out in the otherwise black cave environment. Neolithic people crawled into this cramped area of the cave to specifically lay corpses on the white layer. People may have noted how the soft pasty deposit coated animal bones, such as the Pleistocene fauna remains found by antiquarians in the 19th century. That human bones were similarly coloured, marked or transformed by the cave may have been an important part of excarnation rituals. The white clay may have been associated with concepts of purity, cleanliness or brilliance.

OFFERINGS UNDERGROUND

Some disarticulated human bones and artefacts of Neolithic date may represent votive offerings related to the veneration of a cave, or the veneration of an individual, spirit being or ancestor at a cave. Particular caves may have been foci of prehistoric pilgrimage, a phenomenon evident in the modern-day international Catholic pilgrimage to the cave at Lourdes, France and the Jewish veneration of the Cave of the Patriarchs (Cave of Machpelah), Israel. In Irish caves the presence of polished stone axes in some instances appears to reflect votive deposition, though that they represent gravegoods is also possible (Figure 5.12). For instance, a polished andesite axe from Ballynamintra Cave, a possible flint axe fragment from Kilgreany

Cave, and a possible mudstone axe fragment from Killuragh Cave may be associated with the assemblages of Neolithic human bones from these sites. However, axes have also been found at caves where there is no other identifiable Neolithic material, such as a shale axe from Cloghermore Cave, Co. Kerry; a shale axe from Plunkett Cave, Kesh, Co. Sligo; and a polished sandstone axe from Cappagh Cave, Co. Waterford. A more convincing example of votive deposition is the hoard of polished stone axes found in Grange Hill Cave, Co. Limerick in 1917 or 1918. Only two of the axes can be located at present – a miniature porcellanite axe (7.6cm long) and an exceptionally large diorite axe (26.7cm long) (O’Kelly 1942; 1944; unpublished). The porcellanite axe may have been perceived as exotic or prestigious considering it originated from north Antrim, while the diorite axe was undoubtedly a ceremonial item. Finds such as these may mirror the ritual deposition of polished stone axes and fine quality artefacts in English caves during the Neolithic (Lewis 2011, 51).

At Oonaglour Cave people made a vertical descent from the ground surface into the chamber beneath, probably with the aid of a ladder or ropes, to deposit three polished greenstone axes and a burnt stone axe (Forsayeth unpublished). Also found in the same chamber was a sherd of an Early Neolithic carinated bowl and a large concentration of disarticulated human bones of unknown date, apparently representing two adults and a child (*ibid.*). An adult radius from an unrecorded location in Oonaglour has been radiocarbon dated to the Neolithic (Table 5.1). Does the Neolithic material from this site represent disturbed burials originally accompanied by gravegoods? It is worth noting that Oonaglour Cave is just a few kilometres from Kilgreany Cave (see above). Alternatively, might the material from Oonaglour reflect a series of votive deposits? The act of gradually disappearing from view as an individual descended into the cave is reminiscent of how people dropped into vertical natural swallets and artificial flint mine shafts in Neolithic Britain to carefully deposit disarticulated human and animal bones, complete human cadavers, joints of meat, polished stone axes, lithics and pottery (Barber *et al.* 1999; Russell 2002; Lewis 2000; 2011). As at Oonaglour Cave, material was not simply thrown into the swallets and flint mines but placed with care and consideration.

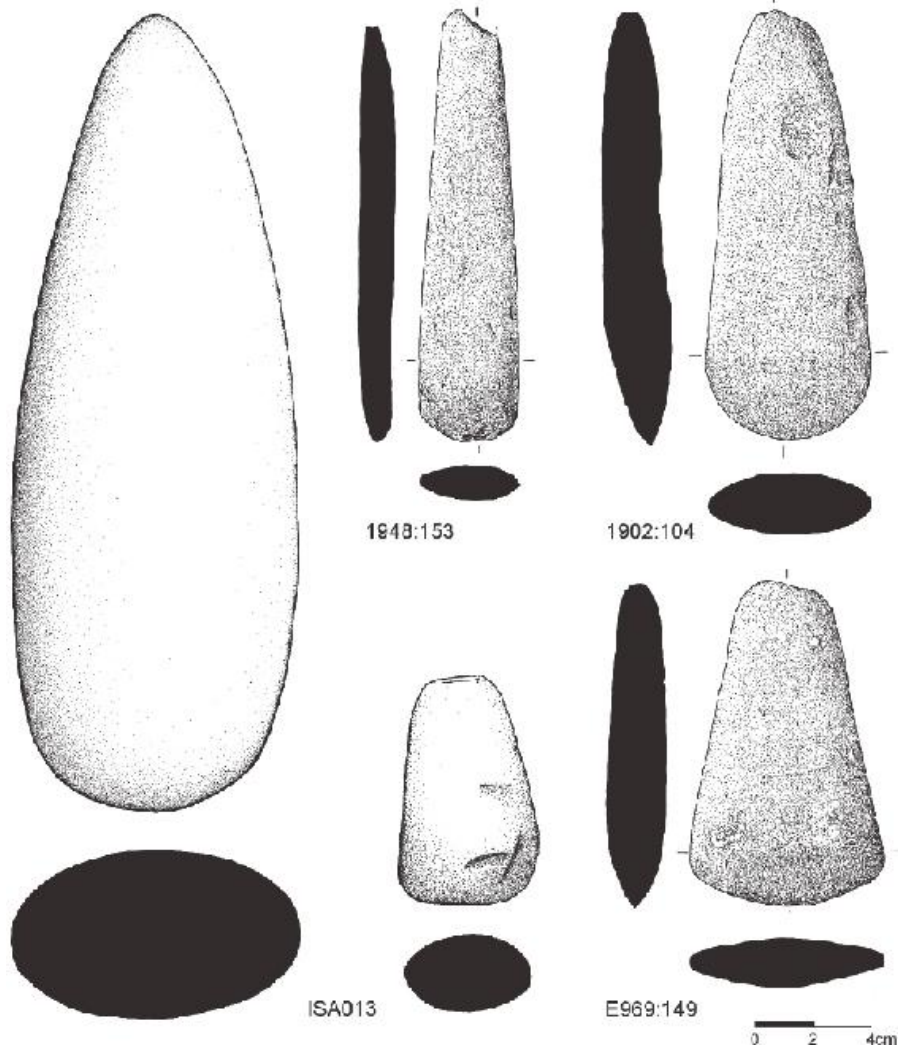


Figure 5.12 Polished stone axes from Grange Hill Cave (based on 1940s sketch; axe now missing); Brothers' Cave; Plunkett Cave, Kesh; Grange Hill Cave; Ballynamintra Cave (Illustrations 1 and 4 Fiachra Dunne; 2, 3 and 5 Malgorzata Kryczka)

An assemblage of Neolithic and possible Neolithic material recovered from Brothers' Cave, located beside Oonaglour Cave, may also represent ritual deposition. The assemblage includes a polished schist axe, a flint blade, a sherd of an Early Neolithic carinated bowl, a sherd of a Middle Neolithic globular bowl, a perforated dog whelk shell and a perforated flat periwinkle. The unusual nature of some items may have distinguished them as suitable for votive deposition. For instance, the blade was manufactured from a broken polished flint axe – a relatively uncommon axe type in Neolithic Ireland; and the

metamorphosis of an axe into a blade may have been significant. Furthermore, the schist axe is a relatively rare chisel form: less than 1% of Irish stone axes are categorised as chisels (Cooney and Mandal 1998, 52). Some of the disarticulated human bones from Brothers' Cave – the majority of which are now lost – may also be Neolithic.

Several caves have produced small quantities of disarticulated human bones of Neolithic date but no associated artefacts. That these small quantities represent disturbed burials is unlikely, but the practices that they relate to are far from clear. Exhumation is one possible explanation, but token deposition is also plausible. For example, 15 human bones were retrieved from Connaberry Cave C, Co. Cork in 1938 and 1940 (Gwynn *et al.* 1942). A maxilla fragment was dated to the Neolithic while a vertebra returned a Medieval date. In this instance, as in so many others, it is not possible to isolate which bones are Neolithic or to identify the nature of prehistoric activities. Similarly, three bones – one of which was radiocarbon dated to the Neolithic – were recovered from Killura Cave, Co. Cork during superficial investigations in 1934 (as distinct from Killuragh Cave, Co. Limerick). There are no published details of the find, the unpublished records are minimal, and even the precise location of the cave is uncertain. In this instance, the value of the radiocarbon date is that it indicates Neolithic activities in caves in this region and presents an opportunity for future investigation.

THE RELATIONSHIP BETWEEN CAVES AND NEOLITHIC SETTLEMENTS: TWO CASE STUDIES

Lough Gur, Co. Limerick, a place best known for its rich concentration of Neolithic and Bronze Age settlements, illustrates the complex and multivariate ways in which people engaged with caves. Several natural caves and fissures are located within a few kilometres of the lake, two of which have produced Neolithic material, in addition to a third pseudo-cave site. In 1904 three human bones representing a Neolithic adult and a juvenile of unknown date were recovered from Red Cellar Cave, situated close to the summit of Knockfennell Hill overlooking Lough Gur (Top. files, NMI; Fibiger forthcoming). Excavations in a cave on Knockadoon Hill, almost directly opposite Red Cellar Cave on the other side of the lake, failed to reveal any archaeological material, but the burial of a Neolithic child was discovered on a terrace 23m from the cave (Cleary 1995). Grange Hill Cave, where a hoard of polished stone axes was found (see above), is located 2.2km northwest of Lough Gur. Just 2.3km west of Lough Gur, a pseudo-cave site at Cahirguillamore was a focus for funerary rituals. The site, now destroyed, consisted of a large limestone slab that rested against a vertical cliff face thereby creating a wedge-shaped chamber. It is not clear whether this was a natural topographical feature or an

artificial structure. If natural, it may have been perceived as a cave by the Neolithic people who used it. The chamber was packed with unburnt disarticulated human bones representing 14 individuals as well as Neolithic pottery sherds, lithics and beads. The entrance opening was sealed by a mound of earth which contained a crouched inhumation burial accompanied by a decorated Neolithic bowl and the butt of a polished stone axe (Hunt 1967; Brindley and Lanting 1989/90). The burial and pottery vessel closely resemble those from Linkardstown-type graves as well as from Annagh Cave.

There is no evidence that any of the caves at Lough Gur were used for settlement or secular activities, though morphologically they would have been perfectly suitable. Some caves appear to have been avoided, though the absence of archaeological material does not necessarily indicate that they were culturally or ritually insignificant. Other caves and pseudo-caves were used for funerary rituals involving human bones and burial, while certain other caves were appropriate locations for votive deposition of prestigious artefacts. For Neolithic farming communities at Lough Gur, it seems caves were not all perceived in the same way but were utilised for differing ritual functions.

At Cloghers, Co. Kerry, a large rectangular Neolithic house, four circular Beaker structures, Bronze Age habitation debris, pits with structured deposits, and a Bronze Age *fulacht fiadh* indicate an area of intense prehistoric settlement (Kiely and Dunne 2005). Interestingly, there is no evidence that Neolithic people carried out activities at a cave and doline situated close to the settlement complex. Fortlands Cave, located 230m from the Neolithic house, is similar in size and morphology to Killuragh Cave and other small caves that were centres of ritual activity in Neolithic Ireland. With the exception of a few possible honestones of unknown date, however, no archaeological material was discovered in the cave during research excavations in 2000 (Dunne 2002a). Similarly, nothing of archaeological significance was encountered during test excavations at a doline known as the Devil's Hole 170m east of the Neolithic house (Dunne 2002b). If uninhibited by foliage or tree growth, the cave and doline would have been visible from the Neolithic house.

The evidence from Lough Gur and Cloghers tentatively suggests that caves located a distance from habitations and relatively hidden may have been more suitable for religious activities that potentially involved secret knowledge, taboo activities or culturally prohibited experiences. Privacy may have been important. This is supported by the fact that, as yet, no Neolithic settlements or domestic activities have been discovered in the immediate environs of any of the caves discussed in this chapter that contained human bones or votive

material of Neolithic date.

PLACES OF WILDERNESS

While the number of caves linked to Neolithic funerary and ritual activities is increasing, it is clear that only a portion of the population were ever placed in caves whether on a short-term (exarnation) or long-term (burial) basis – which is also the case with megalithic tombs. Osteoarchaeological analysis indicates that funerary cave rituals were not restricted to individuals of a particular age or biological sex (Fibiger forthcoming), but their status within the community may have been significant. These individuals were probably perceived as ‘different’, but the assumption that they were of lower social standing (e.g. Schulting 2007, 592; Schulting *et al.* 2010, 87) is more likely a reflection of modern Western perceptions of caves as inferior to monuments.

In general, few artefacts have been found in caves that contain human bones of Neolithic date. Therefore the presence of perforated seashells and perforated animal teeth at several cave sites, and their almost complete absence from other contemporaneous contexts such as settlements or megalithic tombs, is particularly noteworthy (Figures 5.13 and 5.14). Presumably perforated shells and teeth were worn by the dead as jewellery, or may have adorned clothing and the hair. Six perforated flat periwinkle shells, perforated pig tusks, and perforated pig and dog teeth from Kilgreany Cave are almost certainly related to the Neolithic burials. Other parallels include a perforated dog/wolf tooth and a notched probable wolf tooth from Bats’ Cave; a perforated bear tooth and perforated dog whelk shell from Elderbush Cave; a perforated flat periwinkle shell, a perforated pig tusk and a worked pig tusk from the Catacombs; and a perforated flat periwinkle and a perforated dog whelk from Brothers’ Cave. Some of these perforated shells and teeth may be Bronze Age in date, similar to those from Glencurran Cave (Dowd 2009), but their repeat occurrence at sites with Neolithic human bones and other diagnostic finds (e.g. pottery or scrapers) supports a Neolithic date. Furthermore, the hundreds of perforated flat periwinkle shells associated with two crouched inhumations in a Linkardstown-type burial at Knockmaree, Dublin, and a single perforated periwinkle shell from the western recess of Fourknocks I passage tomb, Co. Meath, support a Neolithic date for the perforated seashells from caves (O’ Neill 1852/3; Wilde 1863; Hartnett 1957, 241). Also of note are loose fossils from Bats’ Cave and Elderbush Cave.

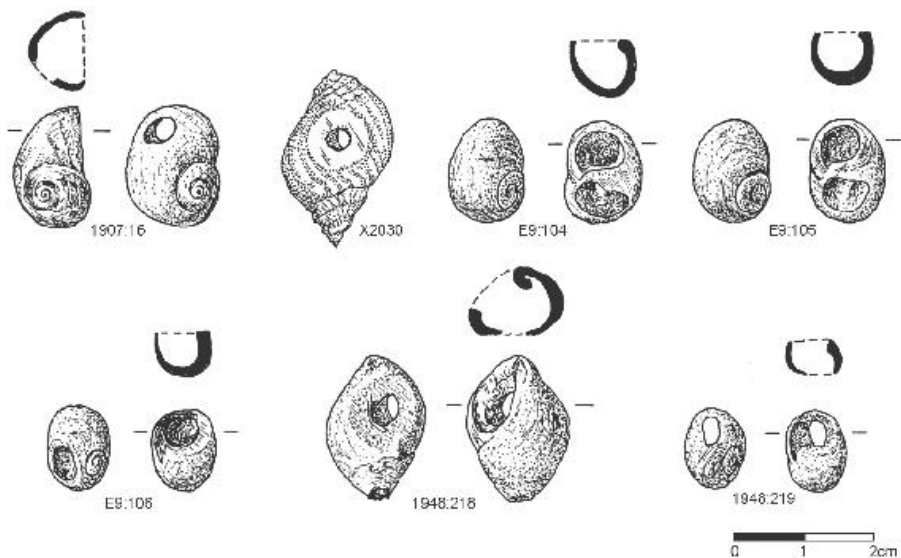


Figure 5.13 Perforated flat periwinkle (*Littorina obtusata*) from the Catacombs, Co. Clare; perforated dog whelk (*Nucella lapillus*) from Elderbush Cave, Co. Clare; three perforated flat periwinkles from Kilgreany Cave, Co. Waterford; perforated dog whelk and perforated flat periwinkle from Brothers' Cave, Co. Waterford (Illustration Malgorzata Kryczka, except Elderbush shell by Eavan O'Dochartaigh)

There is little evidence for the consumption or storage of wild resources during the Neolithic but certainly wild animals, plants and shellfish sometimes complemented Neolithic diets (e.g. Robinson 2000; Boyle 2006) and these resources are likely to have been symbolically significant. It appears to me, for instance, that red deer antlers, antler objects and deposits of unmodified seashells occur with more frequency in megalithic tombs and ritual contexts than on Neolithic settlement sites. The perforated seashells and animal teeth from caves also reference wild animals and the wilderness. It may be especially significant that bear and wolf are represented in the corpus of perforated teeth from caves, two of the most dangerous animals in the Neolithic landscape and animals that were intrinsically linked to caves. Bears and wolves made their lairs in caves, consumed prey in caves, gave birth in caves, died in caves and bears hibernated in caves. A practical concern that Neolithic people faced when selecting a cave for ritual usage was the fear of disturbing these and other cave-dwelling creatures such as foxes, bats and badgers. It is conceivable that caves were monitored for periods of time to ensure they were not occupied by wild animals. The bear tooth pendant from Elderbush Cave and the wolf teeth pendants from Bats' Cave may reflect the return of wild animals to their wild homes. Were the people who wore

these pendants also considered ‘wild’?

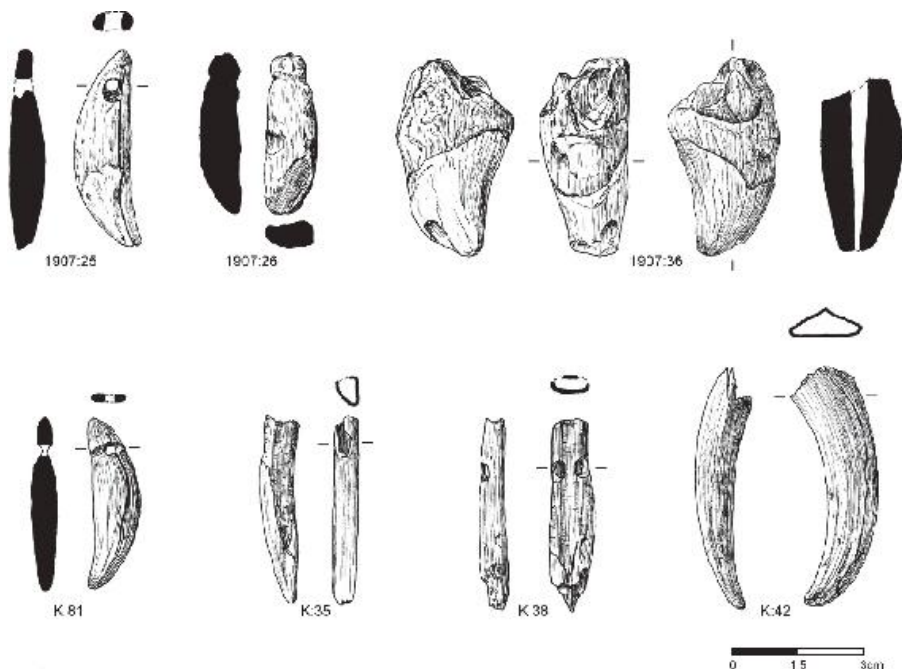


Figure 5.14 Perforated dog/wolf canine and notched probable wolf canine from Bats' Cave, Co. Clare; perforated bear canine from Elderbush Cave, Co. Clare; perforated dog canine, perforated pig incisor, double perforated pig incisor and perforated pig tusk from Kilgreany Cave, Co. Waterford (Illustration Malgorzata Kryczka)

It is plausible that even in a predominantly agricultural society, some individuals continued to hunt wild animals either to supplement food resources or to control predators that threatened livestock. It may have been deemed appropriate that hunters, possibly liminal members of farming communities, were placed in caves after death. Perforated teeth may represent animals killed in a successful hunt. The perforated red deer antler tine and flint arrowhead from Annagh Cave may reflect a similar theme (Figure 5.4). Alternately, many scholars have suggested that parts of animals were believed by prehistoric people to possess the essence and power of that particular creature (e. g. MacGregor 1985; Bednarik 1992). Wearing a tooth pendant might confer the animal's power to the wearer, or might signify that both human and animal shared a particular trait. The animals in question may have been sacred or of totemic importance for an individual or group; the pendants may thus have been social, cultural or religious identifiers. Like the bear and wolf, were the

individuals associated with animal teeth pendants feared? Did they lead lifestyles or occupy roles that were revered or reviled (such as ritual practitioners)? Were these ‘other’ individuals in the community? Were caves perceived as suitable locations in which to contain potent spirits? The large stone on the left shoulder of Kilgreany A and the stones piled over the skull and torso of Kilgreany B may suggest attempts to restrain the dead.

NEITHER DOMESTICATED NOR DOMESTIC SPACES

Throughout Europe the adoption of agriculture brought about intensification in the appropriation of caves as places suitable for religious activities (Barker 1981; Gilks 1989; Armendariz 1990; Whitehouse 1992; Whittle 1992; Ribé *et al.* 1997; Chamberlain and Williams 2000a; 2000b; 2001; Chamberlain 2001; 2012; Dowd 2008; Skeates 2010; 2012a; 2012b; Orschiedt 2012; Stoddart and Malone 2012; Tomkins 2012; Weiss-Krejci 2012). Though caves continued to function as domestic spaces, this was usually with less frequency than in earlier millennia. For instance, in Italy occupation of caves and rock shelters was common in the Palaeolithic and Mesolithic but ‘became the exception’ during the Neolithic (Whitehouse 1992, 14). In Portugal caves ceased to be inhabited in the early Neolithic which Oosterbeek (1997, 70) has interpreted as the ‘rejection of caves as places to live ... [*and*] reflects a widespread sanctification of the cave’.

Inland and coastal caves, lowland and upland caves, were inhabited in Neolithic Europe. Some occupation was short-term in nature and linked to hunting, transhumance or specialised tasks. At other sites, deep strata reveal permanent and long-term settlement. Archaeological material from occupied caves includes refuse middens, butchered animal bones, seashells, hearths, charcoal, lithics, pottery, walling and cobbled or trodden floors (Barker 1981; Whitehouse 1992; Whittle 1992; Ribé *et al.* 1997; Skeates 1997; Mlekuž 2011). There is no comparable material from Irish caves, and no convincing evidence that Neolithic people used caves for domestic occupation. Small collections of Neolithic (or probable Neolithic) lithics from two caves on the Antrim coast indicate some form of Neolithic activity, but in themselves are not convincing of occupation. At Portbraddan Cave six flint blades and flakes were recovered, while two convex scrapers, two retouched flakes and two notched pieces have been identified from Boat Cave (Woodman forthcoming). These lithics may reflect short-term shelter on occasions when people made trips to the coast to avail of marine resources or flint nodules – similar to the Mesolithic evidence from these and adjacent coastal caves (see Chapter 4). However, a blade and flake of likely Neolithic date from Knockninny Cave probably relate to ritual activities (see Chapter 6). Isolated lithics

of likely Neolithic date have been found in other caves but seem to be in secondary contexts and thus little can be said as to what they might represent. Examples include a broken flint flake from Badger Cave, Co. Cork and a very weathered and broken flint flake from Moneen Cave, Co. Clare (Dowd 2014; 2013a) (Figure 5.15).

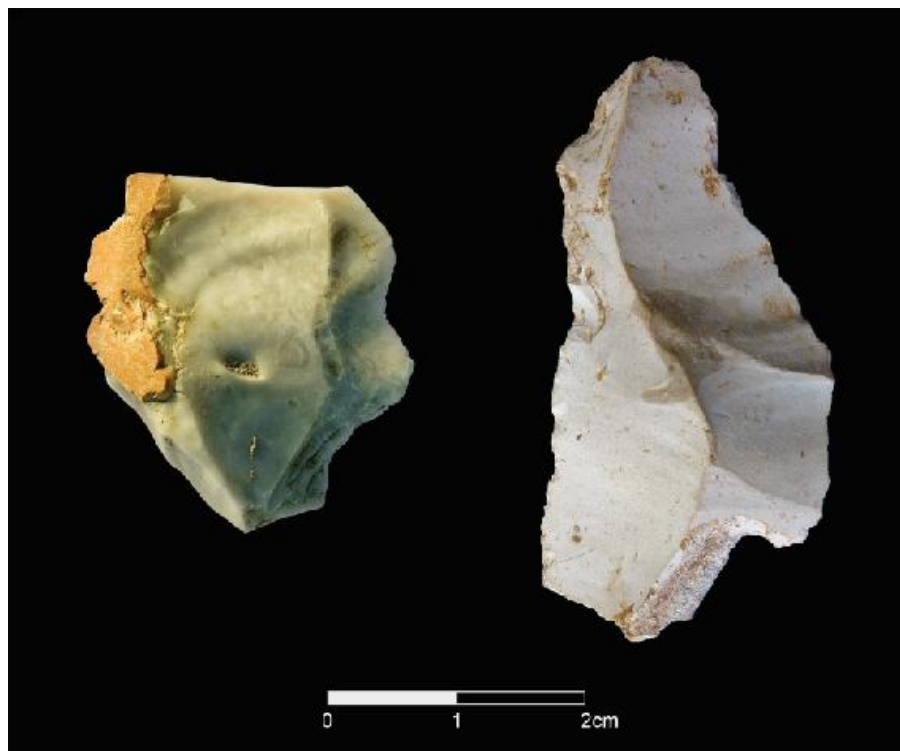


Figure 5.15 Flint flake (07E0672:04:01) from Badger Cave, Co. Cork and flint blade (11E0316:03:163) from Moneen Cave, Co. Clare (Photo Thorsten Kahlert)

REGIONAL PATTERNS IN NEOLITHIC CAVE USE

Antiquarian cave investigations tended to target clusters of caves that were located in proximity to one another which is useful in determining local patterns in cave usage, not just for the Neolithic but for any archaeological period. Between 1902 and 1904 the *Committee Appointed to Explore Irish Caves* carried out excavations in five caves in Co. Clare located within a 1.5km² radius and situated around three lakes – Edenvale Lake, Ballybeg Lough and Killone Lough (Scharff *et al.* 1906) (Figure 5.16). This is generally known as the Edenvale-Newhall cave complex. Artefacts and radiocarbon dates on human bones reveal all caves in the complex were utilised during the Neolithic (Table 5.1). Three of the caves – Elderbush, Bats’ and

Barntick – consist of long narrow passages while the Catacombs and Alice and Gwendoline Cave comprise a more complex network of interconnecting passages. At least four of the five caves seem to have been used for excarnation judging by the disproportionate number of small and peripheral skeletal elements or, less likely, for token deposition of disarticulated human remains. The 20 surviving human bones from Elderbush Cave represent at least two adults (Fibiger forthcoming), one of Early Neolithic and one of Late Neolithic date. Three small bones of a child (3–10 yrs old) of Neolithic date were recovered from Bats' Cave (*ibid.*). The assemblage from Alice and Gwendoline has been lost but apparently comprised mainly of phalanges, carpals and metacarpals; almost all the larger skeletal elements were absent (Scharff *et al.* 1906, 63). Barntick Cave was potentially once visible from Elderbush Cave and Bats' Cave across Ballybeg Lough. Ten human bones representing an adult were found here (Fibiger forthcoming); this adult is roughly contemporaneous with the child from Bats' Cave (Table 5.1). At least three individuals are represented in the assemblage of 22 human bones that survive from the Catacombs excavation (Fibiger forthcoming). Radiocarbon dates on three of the bones reveal post-Neolithic activities, though there is every likelihood that the Catacombs was also used for Neolithic ritual activities considering the discovery of flint scrapers, a perforated seashell and a perforated pig tusk there, as well as the fact that some of the undated human bones may be Neolithic.

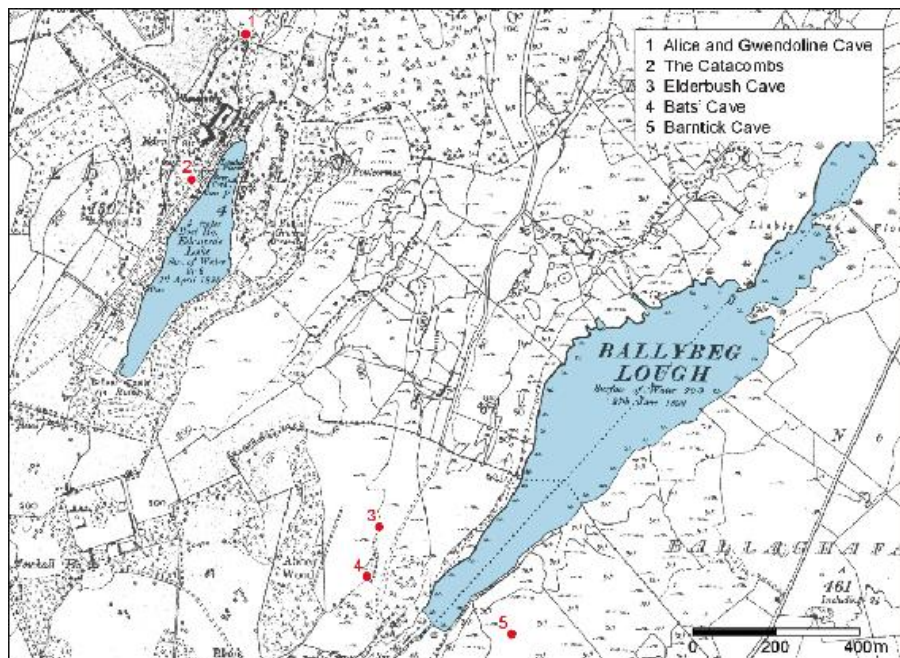


Figure 5.16 The Edenvale-Newhall cave complex, Co. Clare

Caves in the Edenvale-Newhall landscape were reserved exclusively for funerary and ritual activities. It is not clear whether they were all used for the same purpose (e.g. excarnation) or whether different ritual activities took place at different sites. The radiocarbon determinations (Table 5.1) suggest that, broadly speaking, the caves were used contemporaneously. No other Neolithic sites or monuments are known in the wider environs; almost certainly due to a lack of sub-surface investigation as well as destruction of archaeological remains during 18th and 19th century demesne landscaping [the caves are located on the grounds of Edenvale House, Newhall House and Barntick House]. Megalithic tombs of Neolithic date are almost entirely absent from this part of Ireland and therefore the Edenvale-Newhall complex presents important insights into Neolithic mortuary customs in non-megalithic regions. But what happened to the greater parts of the skeletons that are not represented in the human bone assemblages from these caves? The three lakes central to the complex potentially served as watery graves for secondary deposition, particularly if the caves had functioned as excarnation sites.



Figure 5.17 Caves with Neolithic material in the Dungarvan Valley, Co. Waterford

A similar regional pattern in ritual cave use is found in the Dungarvan Valley, Co. Waterford (Figure 5.17). Here, six caves situated within an area $4\text{km} \times 2\text{km}$ produced artefacts or human bones of Neolithic date which reflect a variety of practices including burial, token deposition of human remains, and possibly votive

deposition of artefacts. The use of these caves is summarised chronologically, with further detail of individual sites provided above.

Various Early Neolithic finds reveal that caves in the Dungarvan Valley were associated with ritual and religion from the beginning of the period. Single sherds of Early Neolithic carinated bowls have been recovered from both Brothers' Cave and the adjacent Oonaglour Cave (Roche forthcoming). As seemingly isolated finds, it is difficult to assess what the sherds represent and whether or not they are deliberate deposits. However, the presence of 16 sherds from seven carinated bowls scattered through the inner chamber of Kilgreany Cave (*ibid.*) suggest that in all three cases, the pottery may represent special offerings, mirrored in the later use of these caves for the deposition of human remains. Because excavations at Kilgreany were extensive, it is clear that only sherds and not intact vessels were originally deposited. The oldest human bone so far identified from Kilgreany, an infant humerus (6–12 mths old), also came from the inner chamber and may reflect rituals that involved the placement of disarticulated human bones (broken bodies), together with sherds of broken pots (disarticulated vessels) inside the cave. An Early Neolithic adult male from Quinlan's Quarry Cave may represent a disturbed interment or a votive deposit of disarticulated bone.

Votive deposition seemingly continued to take place at these caves during the Middle Neolithic. Single sherds of Middle Neolithic globular bowls were found in both Brothers' Cave and Kilgreany Cave (Roche forthcoming). A number of other Neolithic artefacts, including a polished stone axe, from Brothers' Cave and may comprise special deposits (see above). As described earlier, Kilgreany Cave was an important local communal burial place, with relatively intense activities spanning several generations and centuries, while Ballynamintra Cave was used for excarnation at this time. A human adult radius from Oonaglour Cave and a human skull from Carrigmurrough Cave also allude to Middle Neolithic rituals. The Carrigmurrough skull is of an adult male, at least 25 years old at the time of death. It was heavily encased in calcite when found in the 1950s by a tourist (Fibiger forthcoming). The find is unusual in that skulls of Neolithic date are rarely found in Irish caves, apart from burial contexts. However, future excavations may indicate the presence of more extensive human skeletal remains deeper in Carrigmurrough Cave.

By the Late Neolithic activities in the Dungarvan Valley caves had diminished, though Ballynamintra Cave appears to have continued to function as an excarnation site. None of the caves were used for habitation at any stage during the Neolithic, though several were occupied in Early Medieval times and were therefore also suitable for

prehistoric occupation. No Neolithic settlements or houses have been identified in this region and thus it is currently not possible to discuss the physical relationship between ritual caves and domestic life in the Dungarvan Valley. However, Bronze Age and Iron Age material supports the contention that for much of prehistory, caves in this region were places apart, places linked to the religious dimension of life (see Chapters 6 and 7).

LONG HELD TRADITIONS

In Neolithic Ireland caves were theatres in which a variety of different religious practices and ceremonies were enacted. The underground world was sacred, marked by special deposits, offerings, human bodies and bones placed inside caves. Entering this realm – like entering enclosed megalithic tombs – had profound spiritual meanings. It was a space where transformations took place, and a place where the dead embarked on journeys to other worlds. While it is true that prehistoric people may have observed little distinction between natural features and artificial constructions (Bradley 2000; Barnatt and Edmonds 2002), there is increasing evidence that different activities took place inside caves and monuments, and that distinctions between the two were recognised and maintained. The association between caves and ritual activities must have been widespread and persistent because, despite the manifold changes that came with copper and bronze technology, caves continued to feature in the religious lives of Bronze Age populations. In fact, many of the sites that had been important to Neolithic communities were revisited in the Bronze Age and continued to be used for burial and votive deposition. Long-held traditions about the sacred nature of certain caves prevailed from generation to generation to generation.

Chapter 6

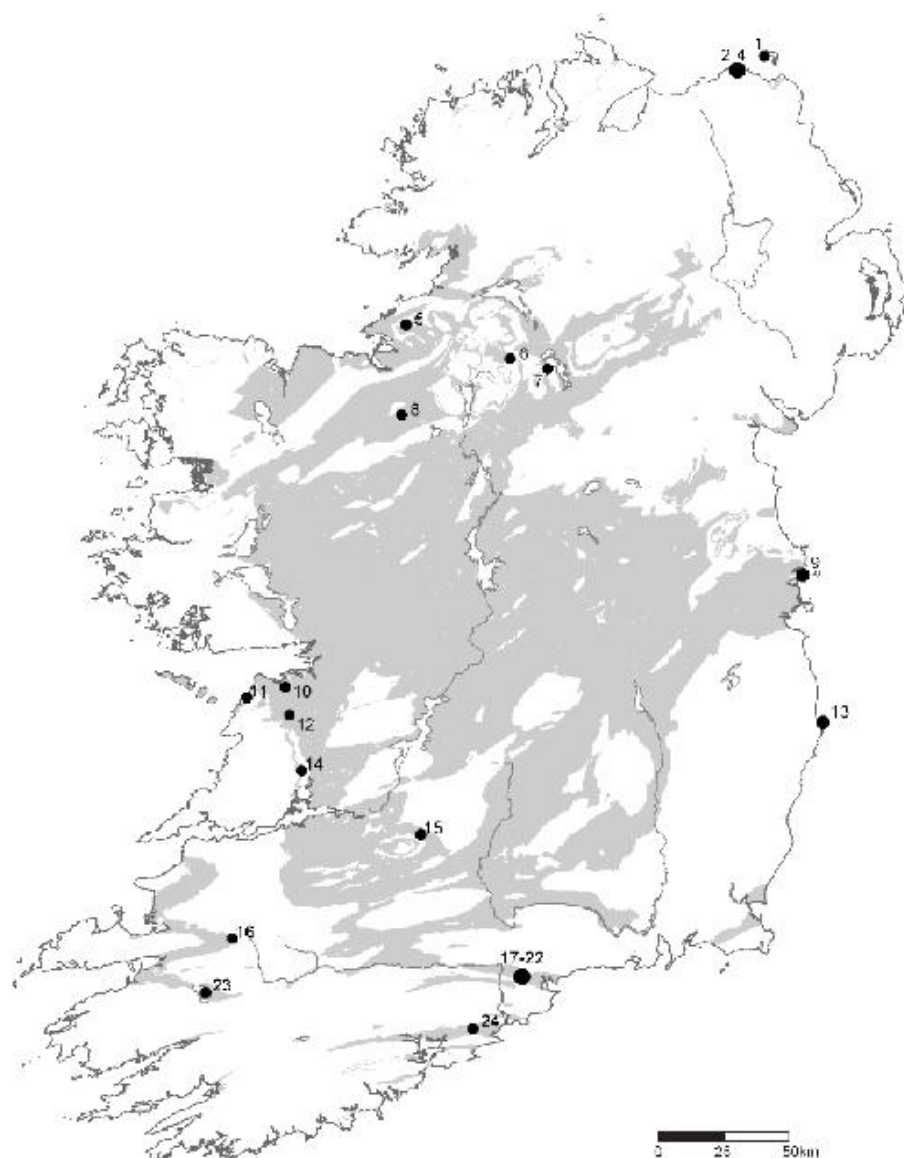
Journeying Deeper into Darkness the Bronze Age (2400–600 BC)

As the population of Bronze Age Ireland increased, there is evidence for more intensive levels of deforestation, land cultivation and management, territorial control and ownership (Grogan 2005, 169–86; Doody 2008, 622). Settlements spread into marginal areas such as wetlands and uplands. Competition for land may have led to the inclusion of territory previously considered as marginal into the social and economic use of landscape (O’Sullivan and Breen 2007, 80). The economy of the majority remained agricultural, but the extent of the physical wilderness that Mesolithic and Neolithic people would have experienced had diminished considerably.

The Bronze Age is well represented in Irish cave assemblages with material from at least 24 sites – over 25% of known caves of archaeological significance (Figure 6.1; Table 6.1). Cave usage in the Early and Late Bronze Age is particularly pronounced, with somewhat of a lull during the Middle Bronze Age (Figure 6.2). There is a degree of continuity from the Neolithic in that activities in caves are still focused around burial and ritual, but distinct differences also emerge. The Bronze Age brings a growing concern with seeking out and interacting with the wilderness offered by deep cave environments: a sought-after separation or isolation from the outside world. This desire to be immersed in darkness, presumably for religious purposes, is not apparent in any earlier or later archaeological periods. Many caves selected for funerary and ritual activities at this time occur on topographical boundaries in prominent locations, and in landscapes that were rich in monuments. This contrasts with the Neolithic where secrecy and a distance from settlements were important. An element of secrecy persisted into the Bronze Age, however, in that while caves may have been prominently located, the journeys undertaken to reach cave entrances or to access deep subterranean chambers were often fraught with difficulty. Evidence that caves were used for short-term occupation during the Bronze Age also survives.

CONTINUING RITUAL USAGE OF NEOLITHIC SITES

Many of the caves that were places of Neolithic ritual activity played a similar role in Bronze Age religious practice. This is most apparent in the Dungarvan Valley, Co. Waterford where a cluster of six caves have produced evidence of both Neolithic and Bronze Age ritual: Ballynamintra Cave, Quinlan's Quarry Cave, Carrigmurrish Cave, Brothers' Cave, Oonaghlour Cave and Kilgreany Cave (Figure 5.17). These sites – and conceivably other caves in the region – are likely to have been sacred because of long-term and ancestral associations with religious ritual. They were visited time and time again over many generations. This mirrors general patterns from Bronze Age Britain where the 'repeated use of sites, harking back to earlier patterns of actions despite periods of absence, shows an underlying continuity of human memory' (Gosden and Lock 1998, 8).



- | | | |
|-------------------------------|-------------------------------|--------------------------|
| 1 Oweyborne Cave 3 | 9 Portlano - cave | 17 Ballynamindra Cave |
| 2 Chimney Cave | 10 Monoon Cave | 18 Carrigmurish Cave |
| 3 Potter's Cave | 11 Rubber's Den | 19 Quinlan's Quarry Cave |
| 4 Portbradden Cave | 12 Glencolum Cave | 20 Ooneglour Cave |
| 5 Diarmuid and Grainne's Cave | 13 Dunbur Head - rock shelter | 21 Brothers' Cave |
| 6 Pollthanacarra | 14 The Catacombs | 22 Kigreeary Cave |
| 7 Knockninny Cave | 15 Killuragh Cave | 23 Ross Island Cave |
| 8 Kesh Caves | 16 Kilnurry Cave | 24 Knockane Cave |

Figure 6.1 Caves with material of Bronze Age or probable Bronze Age date

The previous chapter explored the evidence that Ballynamindra Cave was an excarnation site during the Neolithic, and direct dating of a human metatarsal suggests it served the same function into the Early

Bronze Age (Table 6.1). An amber bead and a sherd of Late Bronze Age pottery (Roche forthcoming) indicate activities at Ballynamintra towards the end of the Bronze Age. What these two artefacts represent is unclear, but the votive deposition of pottery sherds in caves (discussed below), as well as the prestigious nature of amber in Bronze Age society, plausibly reflect a continued perception of Ballynamintra Cave as a special place in the landscape. At the nearby Quinlan's Quarry Cave human bones of Neolithic and Bronze Age date were found but little is known about the original discovery. There is some suggestion that articulated burials were present, and thus the pelvis of an adult female of Middle Bronze Age date may represent a burial in a cave that had been similarly used during the Neolithic (Table 6.1; Chapter 5). Carrigmurish Cave is best known for its Early Medieval assemblage, but a human skull from the site has been radiocarbon dated to the Neolithic and a re-examination of the excavation assemblage has led to the identification of a substantial assemblage of Late Bronze Age pottery: 87 sherds derived from nine different vessels (Roche forthcoming). We cannot assume that the pottery necessarily reflects ritual activities but at present this seems the most likely scenario considering: the Neolithic human skull; no further Bronze Age material has been identified from this cave; the evidence for votive deposition of pottery sherds in caves at this time; the proximity of Carrigmurish to caves where metalwork hoards were deposited in the Late Bronze Age; and the morphology of the cave which makes occupation or domestic activities highly unlikely.

<i>Site</i>	<i>Material</i>	$\delta^{13}\text{C}$	<i>Lab code</i>	<i>Measured radiocarbon years (BP)</i>	<i>Calibrated radiocarbon date (2σ) BC</i>
Antrim, Oweyberne Cave 3 (Forsythe and McConkey 2012; Wes Forsythe pers. comm.)	Charcoal (stakehole)	-27.6	UBA-6564	2636 $\pm$ 39	895-775
	Charcoal (stakehole)	-28.7	UBA-6563	3085 $\pm$ 38	1430-1235
	Charcoal (hearth)	-28.7	UBA-6562	2846 $\pm$ 36	1115-915
Antrim, Portbaddan Cave (Peter Woodman pers. comm.)	Seashell, Limpet	2.5	UBA-6711	3262 $\pm$ 34	1620-1450
Antrim, Potter's Cave (Peter Woodman pers. comm.)	Charcoal	-27.4	UBA-6707	2502 $\pm$ 35	790-515
	Pig, Unspecified bone	-22.6	UBA-6708	2454 $\pm$ 34	755-415
Clare, the Catacombs (M. Dowd)	Human, Adolescent R ulna	-25.2	UBA-8150	2488 $\pm$ 27	775-515
Clare, Glencurran Cave (Dowd 2009; M. Dowd)	Human, Adult fibula	-21.59	UBA-13464	3047 $\pm$ 23	1395-1225
	Human, L clavicle (possibly adult)	-24.5	UBA-8147	3058 $\pm$ 26	1405-1235
	Human, Child (2-3 yrs) fibula (R?)	-20.4	KIA-36574	3062 $\pm$ 27	1410-1240
	Human, Adult R metacarpal	-21.49	UBA-13460	3065 $\pm$ 27	1410-1235
	Human, Adult L fibula	-24.0	UBA-6660	3035 $\pm$ 36	1410-1135
	Human, Adult proximal hand phalanx	-21.64	UBA-13458	3091 $\pm$ 21	1415-1290
	Hare, Tibia	-23.01	UBA-19267	2831 $\pm$ 27	1070-910
	Sheep, Butchered vertebra	-21.84	UBA-19270	2995 $\pm$ 29	1375-1125
	Cow, Butchered metatarsal	-22.09	UBA-19263	2482 $\pm$ 28	775-490
	Human, Adult L ulna	-21.11	UBA-6922	2426 $\pm$ 32	750-405
	Cow, Butchered metatarsal	-22.29	UBA-19264	2540 $\pm$ 27	800-550
	Human, Adult R clavicle	-22.3	UBA-8148	2454 $\pm$ 25	755-415
	Human, Child (2-3 yrs) L ilium	-19.2	UBA-6661	2536 $\pm$ 31	800-545
	Piglet, R pelvis	-22.97	UBA-13244	2588 $\pm$ 22	805-770
	Piglet, Newborn mandible	-22.8	UBA-19274	2644 $\pm$ 48	910-770
	Sheep, Butchered humerus	-22.54	UBA-19268	2547 $\pm$ 27	800-550
	CalF, Metatarsal	-23.12	UBA-19271	2608 $\pm$ 33	835-760
	Cow, Butchered metatarsal	-22.07	UBA-19269	2566 $\pm$ 35	810-550
	Large mammal (prob. cow), Rib	-25.5	UBA-19265	2492 $\pm$ 29	780-515
Clare, Moneen Cave (Dowd 2013a)	Antler hammerhead/macehead	-22.2	UBA-20291	3645 $\pm$ 46	2140-1895
	Red deer antler, Unmodified piece	-25.0	UBA-19912	2970 $\pm$ 38	1370-1050
	Large mammal (prob. cow), Rib with skinning marks	-23.2	UBA-19276	2744 $\pm$ 30	975-820
	Seashell, Oyster	0.5	UBA-20292	3113 $\pm$ 28	marine reservoir correction not applied 790-430
Clare, Robber's Den (P. Woodman and M. Dowd)	Human, Adult female ribs	-22.14	GRN-27381	2490 $\pm$ 60	790-430
Fernanagh, Polthanasarra (M. Dowd)	Human, Adult L humerus	-24.6	UBA-8154	3804 $\pm$ 34	2430-2140
	Human, Adult L humerus	-25.4	UBA-8153	3745 $\pm$ 34	2280-2035
	Human, Adult L humerus	-27.6	UBA-8152	3629 $\pm$ 37	2130-1895
Limerick, Killorough Cave (Meiklejohn and Woodman 2012; Peter Woodman pers. comm.)	Human, Adult mandible	-21.1	OxA-6748	3775 $\pm$ 45	2345-2035
	Human, Adult R radius	-21.08	OxA-25558	3599 $\pm$ 29	2030-1890
	Dog, Mandible	-20.9	OxA-6750	3930 $\pm$ 45	2570-2290
	Pig, Mandible	-21.6	OxA-6753	3285 $\pm$ 45	1680-1450
	Horse, Sacrum	-22.8	OxA-6754	3020 $\pm$ 45	1400-1130
Waterford, Ballynamrintra Cave (M. Dowd)	Human, Adult L metatarsal	-21.5	Beta-277384	3720 $\pm$ 40	2275-1980
	Human, Adult R maxillary molar	-21.2	Beta-277398	3710 $\pm$ 40	2270-1980
Waterford, Brochers' Cave (M. Dowd; P. Woodman and M. Dowd)	Human, Adult molar	-21.21	GRA-21488	3760 $\pm$ 50	2345-2025
Waterford, Kilgreany Cave (M. Dowd)	Human, Child (3-4 yrs) R maxilla	-21.9	Beta-277389	3470 $\pm$ 40	1895-1690
	Human, Neonate (< 1 month) R humerus	-22.4	UBA-6408	3267 $\pm$ 35	1625-1450
	Human, Adult cremated cranial vault	-18.6	Beta-277390	3120 $\pm$ 40	1495-1280
Waterford, Quinlan's Quarry Cave (M. Dowd)	Human, Adult female L pelvis	-23.8	Beta-277391	2990 $\pm$ 40	1385-1060

Table 6.1 Bronze Age radiocarbon dates from caves

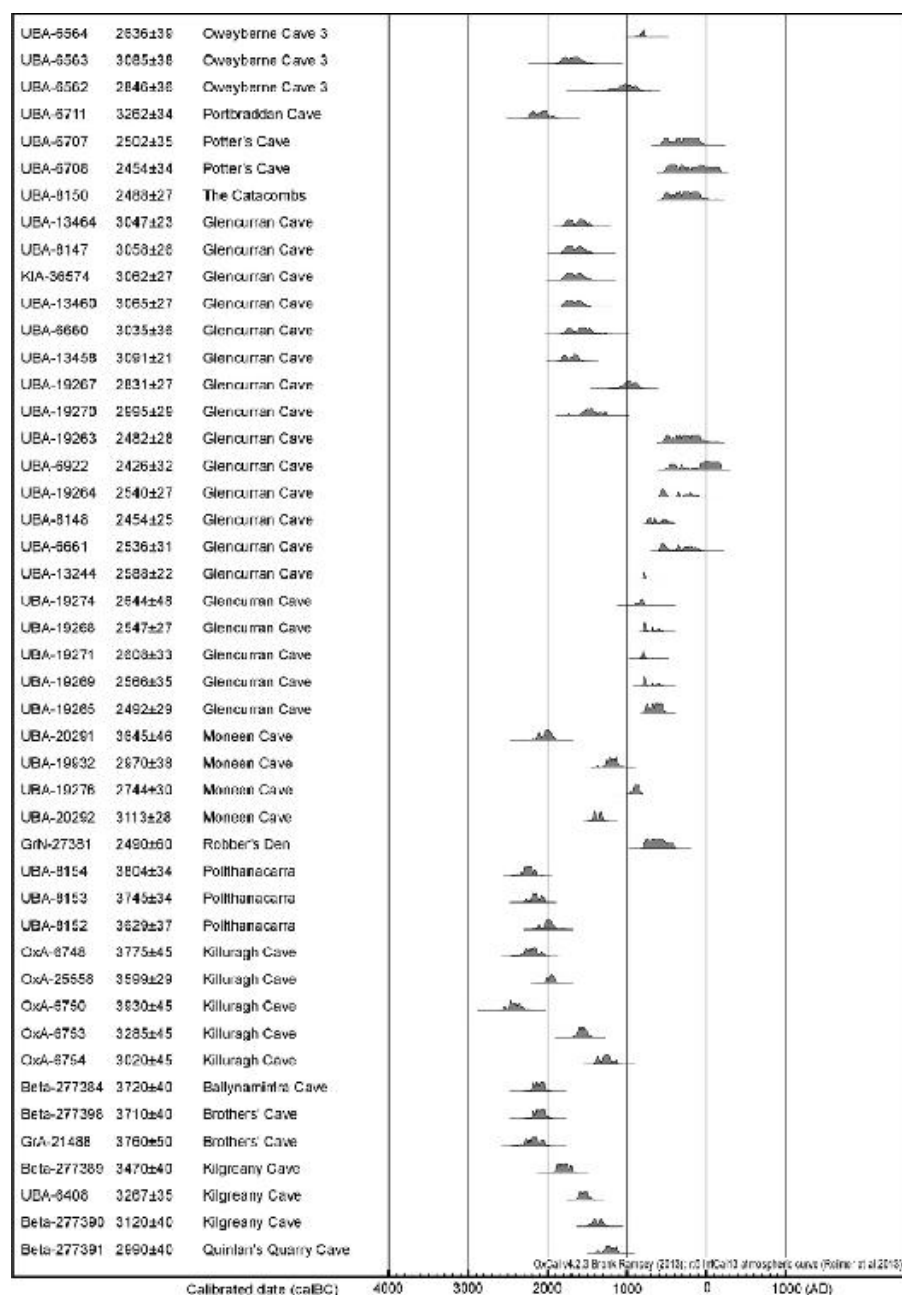


Figure 6.2 Bronze Age radiocarbon dates from Irish caves

Like Carrigmurrish Cave, Brothers' Cave consists of a circular opening on the ground surface which drops into a large subterranean system. This cave was repeatedly visited during the Neolithic and Bronze Age, with the ritual deposition of artefacts and disarticulated human bones (possibly also complete corpses). Brothers' Cave has

produced the most varied prehistoric pottery assemblage of any Irish cave with sherds from an Early Neolithic carinated bowl, a Middle Neolithic globular bowl, a domestic Beaker vessel, an Early Bronze Age cordoned urn and four Late Bronze Age pots (Roche forthcoming) (Figure 6.3). Most vessels are only represented by one, or a small number of, sherds; nothing resembling a complete pot was encountered. Also recovered from Brothers' Cave were three saddle querns, quartz crystals and a piece of bronze that may represent a Bronze Age dirk or dagger (Forsayeth unpublished). Human bones, mostly unburnt but some cremated, were also documented but since their discovery between 1906 and 1913, almost all have been lost. Colonel Richard W. Forsayeth, the retired military surgeon who excavated Brothers' Cave, recorded in his notebooks the discovery of over 50 human bones representing at least one foetus, two children, a young adult and cremated remains of a second adult. Only seven human bones from Brothers' can be located at present including two teeth, possibly from the same individual, of Early Bronze Age date (Table 6.1). At first glance some of the artefacts from Brothers' Cave might suggest domestic debris that was conveniently disposed of in the cave as occurred in Early Medieval times. However, the human bones and the presence of two Late Bronze Age hoards (see below) strongly suggest that this was another place of votive deposition over a lengthy period of time.

The entrance to OonagLOUR Cave is just 45m from Brothers' Cave and it also produced a range of Neolithic and Bronze Age material. Neolithic activities were represented by polished stone axes, pottery and human bones (see Chapter 5). Bronze Age finds include sherds from two Beaker vessels (which were distinct from the Brothers' Beaker pot) (Figure 6.3), and a Late Bronze Age socketed spearhead that was found on the ground surface beside the cave opening. Over 500 human bones came from OonagLOUR Cave but only 74 can be located at present. These represent at least one adult and one juvenile (Fibiger forthcoming). However, during the excavation Colonel Richard W. Forsayeth identified the presence of a foetus (3–4 mths uterine age), an infant (6–9 mths old), two children (8–9 yrs old and 11–13 yrs old), an adult (<25 yrs old), a middle-aged adult and an elderly adult in the OonagLOUR assemblage (Forsayeth unpublished). Some, if not all, of these individuals are likely to be Neolithic and Bronze Age in date.

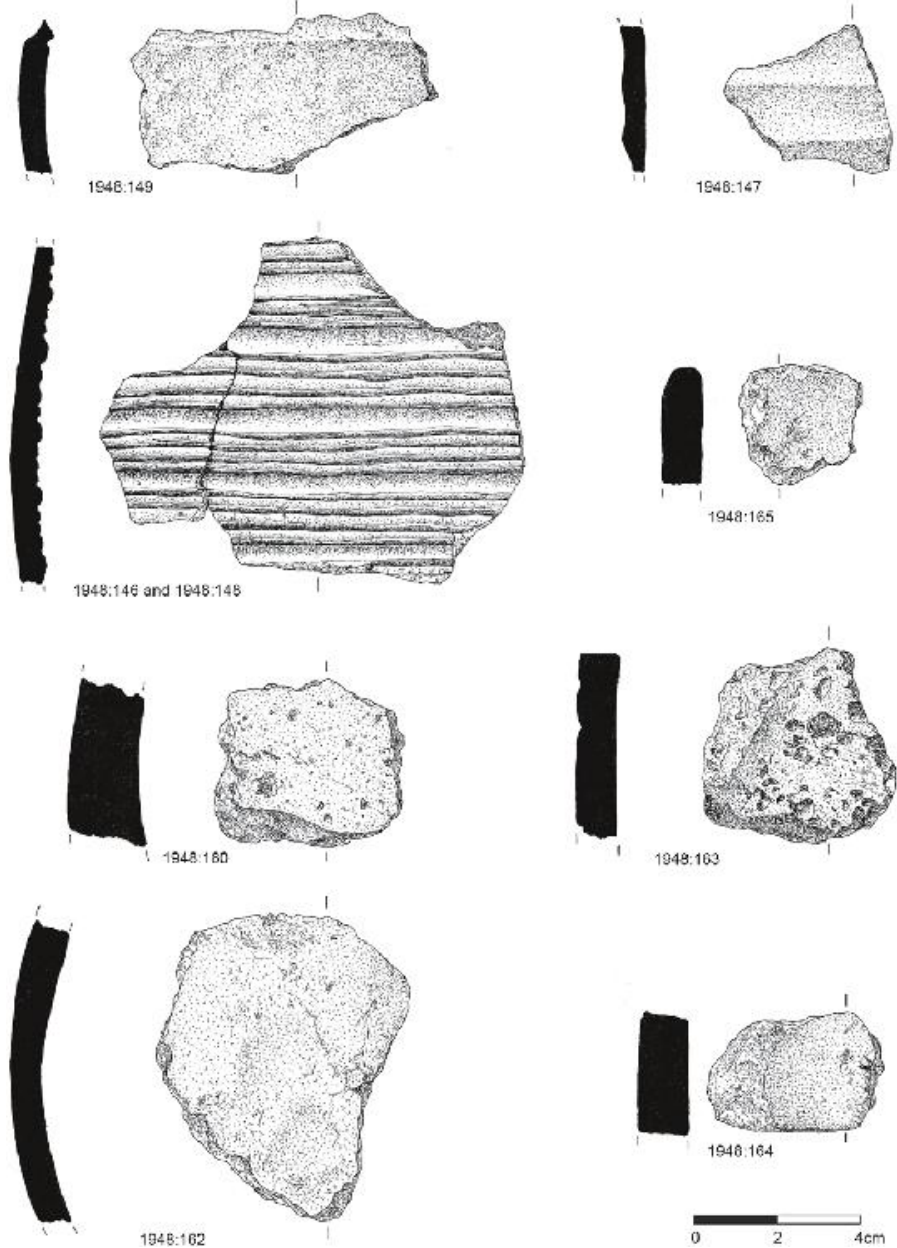


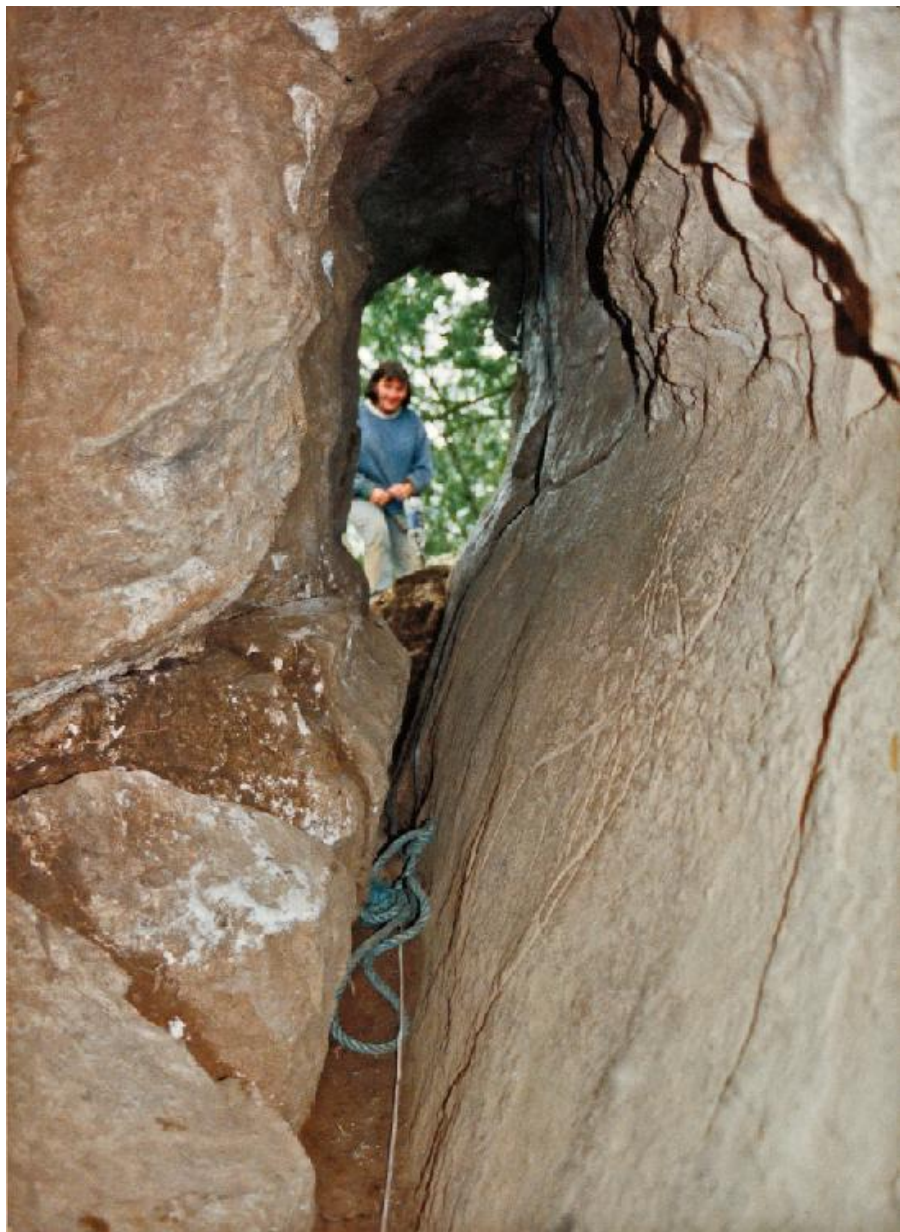
Figure 6.3 Bronze Age pottery from Oonaghlour Cave and Brothers' Cave, Co. Waterford. Oonaghlour: Early Neolithic carinated bowl (1948:149); domestic Beaker (1948:147); domestic Beaker (1948:146&148). Brothers': probable domestic Beaker (1948:165); probable cordoned urn (1948:160); Late Bronze Age vessel 2 (1948:163; 1948:162); Late Bronze Age vessel 3 (1948:164) (Illustration Malgorzata Kryczka)

Sites outside the Dungarvan Valley also display a Bronze Age

concern with caves that had been used for ritual purposes in earlier times. Killuragh Cave has been discussed in previous chapters in relation to Mesolithic and Neolithic ritual activities involving the deposition of small quantities of disarticulated human bones, stone tools and the burial of a Neolithic dog at the cave entrance. A series of human and animal bones from Killuragh have also returned Bronze Age dates (Table 6.1). Two Early Bronze Age human bones have been recovered; an Early Bronze Age dog mandible and a Middle Bronze Age pig mandible were found together in an alcove in the cave wall; and a Middle Bronze Age horse sacrum was associated with cut features at the end of the cave (Woodman 1997, 68). Roughly contemporaneous with some of the human and animal bones are nine sherds representing three different Early Bronze Age vase urns (Roche forthcoming). The Mesolithic and Neolithic material from Killuragh seems to reflect activities at the entrance whereas in the Bronze Age people were squeezing through the tight narrow passage to deposit material in an end chamber (Figure 6.4). Though the manner in which people engaged with the cave changed, the essential ritual act remained the same: namely, the deposition of disarticulated human and animal bones and artefacts. The final phase of prehistoric activity at Killuragh, after intermittent use over several millennia, was the deposition of 32 sherds of Late Bronze Age pottery, derived from three different vessels (Roche forthcoming).

PERSISTENT PLACES: CASE STUDY OF KILGREANY CAVE

The idea that certain topographical features and monuments were persistent places over long periods of time in prehistory is true for several of the caves discussed above, and is particularly evident at Kilgreany Cave, Co. Waterford. Of the 22 individuals identified in the human bone assemblage from the site, five are of Neolithic date, three are of Bronze Age date, and 14 are currently undated (Fibiger forthcoming). At least some of the Neolithic remains represent complete inhumation burials (see Chapter 5). The earliest human bone of Bronze Age date from Kilgreany is a maxilla fragment of a child (3–4 yrs old) (Table 6.1). It may represent the deposition of a disarticulated bone as no other remains of a 3–4 year old child are present in the assemblage (*ibid.*).



*Figure 6.4 Looking out the main passage of Killuragh Cave, Co. Limerick
(Photo Marion Dowd)*

Towards the beginning of the Middle Bronze Age, the remains of a baby less than a month old at the time of death were placed in Kilgreany Cave (Table 6.1). At least three neonates or infants are represented in the overall assemblage from the site which means that it is not possible to determine whether the Middle Bronze Age infant bone represents a fleshed burial or a token deposit of disarticulated

bone. Certainly the cave was used for burial at this time, as indicated by the cremated adult cranial fragment of Middle Bronze Age date (Table 6.1). Two deposits of cremated human bones were discovered during the 1934 excavations at Kilgreany – one outside the cave entrance (‘a pint of well calcined bones’) and the second in a fissure in the cave wall near the entrance (‘about a half pint of calcined bones’) (Movius 1935, 295). The cremated deposits were identified at the time as representing two separate burials, each of an adult male. At present, just 149g of cremated bone from Kilgreany Cave can be located and represent at least one adult and one juvenile. Fissuring and distortion indicate that the individuals had been cremated when fleshed (Fibiger forthcoming). It is unclear whether the surviving cremated bone represents one of the two deposits originally recovered at Kilgreany, or whether the two deposits were mixed together at post-excavation stage.

Though future radiocarbon dates may indicate otherwise, at present no human bones of Late Bronze Age date have been identified from Kilgreany Cave. The current evidence suggests that the deposition of human remains (bodies and/or bones) during the Early and Middle Bronze Age was replaced by the deposition of artefacts in the Late Bronze Age. Sherds representing 13 different Late Bronze Age pottery vessels were recovered scattered through different parts of the cave. Ten of these vessels are represented by just one to eight sherds each, while two vessels are represented by approximately 20 sherds each (Roche forthcoming). The paucity of sherds, considering the number of vessels, strongly suggests that originally only sherds of broken pots were placed in the cave and rarely complete vessels. There is an exception: one of the Late Bronze Age vessels is represented by more than 70 sherds and is likely to have been deposited intact. It is worth remembering that the Early Neolithic pottery assemblage from Kilgreany similarly reflected the deposition of small quantities of sherds from different vessels (Chapter 5).

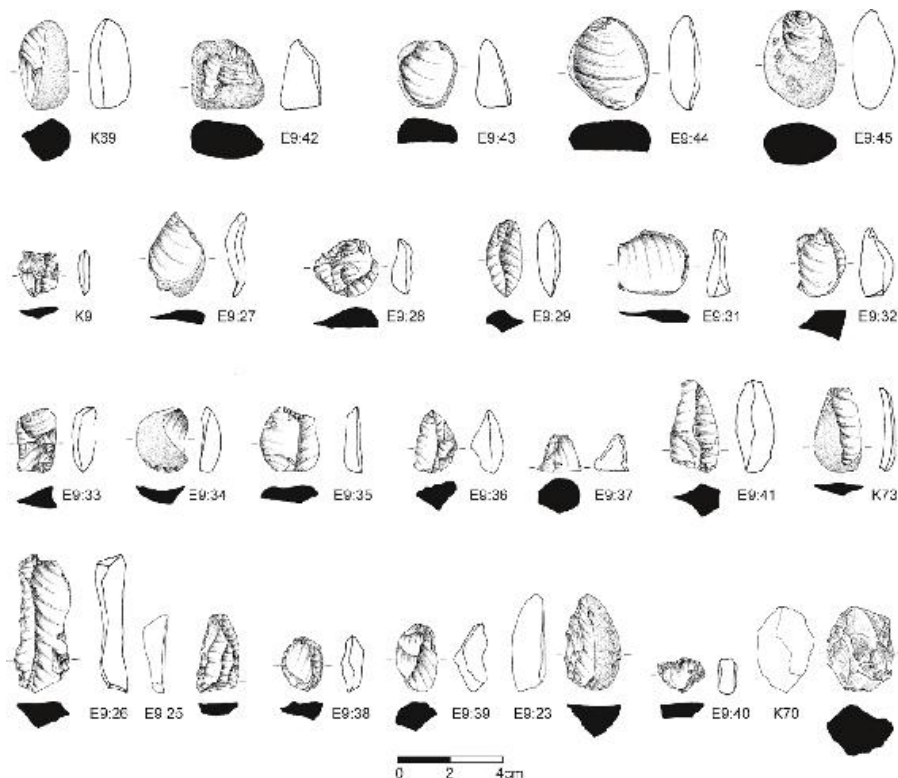


Figure 6.5 Bronze Age worked flint from Kilgreany Cave, Co. Waterford. Split pebbles (K69; E9:42-45); flakes struck from pebbles, and portions of bipolar cores (K9; E9:27-29; E9:31-37; E9:41; K73); blade and blade fragment (E9:26-25); convex scrapers (E9:38-39); retouched pieces (E9:23; E9:40). Date uncertain: rock crystal core (K70) (Illustration Malgorzata Kryczka)



Figure 6.6 Late Bronze Age metalwork from Kilgreany Cave, Co. Waterford. Bulbheaded pins (K77; K69); Thorndon type socketed knife (K66); tanged bifid razor (E9:71) (Photo NMI)

A Middle or Late Bronze Age assemblage of approximately 30 pieces of struck flint was also scattered through Kilgreany Cave (Figure 6.5). The assemblage indicated a bipolar technology and included split pebbles, some retouched tools such as scrapers, and an object that is either a fabricator or an unfinished slug knife (Woodman forthcoming). The absence of debris suggests that little or no knapping took place inside the cave (though this may reflect antiquarian recovery biases), but if it did, it was expedient and limited (*ibid.*). Taken together, the lithics and pottery from Kilgreany may point to use of the cave for occupation or short-term shelter, similar to the evidence from caves in Antrim (see below). That said, the Late Bronze Age metalwork suggests votive deposition and all earlier archaeological material reflects a perception that the cave was a sacred place in the landscape. In this light, the pottery and lithics may reflect some form of special deposit. Another possibility is that the manner in which the cave was utilised may have changed at different times during the Bronze Age. While primarily a place of ritual activity, it may have been occasionally occupied – possibly as a hideout in times of strife, or by an individual who was not aware of its religious significance, for instance someone travelling from a different region.

While questions remain as to the nature of activities represented by

the Late Bronze Age pottery and lithics from Kilgreany Cave, there can be little doubt that the Late Bronze Age metalwork from the site reflects votive deposition (Figure 6.6). A bifid razor, two bulb-headed pins and a socketed knife were found scattered through the cave strata; three of these items were recovered from the outer chamber in relatively close proximity (Dowd 2002). Two small amber beads and a perforated pig tusk also from the outer chamber may be related. Whether the metalwork was deposited as a hoard that was subsequently dispersed or whether the artefacts reflect a series of different offerings is unknown because of the level of stratigraphic disturbance. The deposition of a single artefact may have been as ritually effective as a hoard (Cooney and Grogan 1994, 166) which is relevant when assessing the ‘bronze celt’ documented from Diarmuid and Gráinne’s Cave, Co. Sligo and a Late Bronze Age socketed spearhead discovered near the Kesh Caves in the same county (Wood-Martin 1887/8, 154; Dowd 2013b). Isolated finds of human bones might be similarly interpreted, such as a human ulna from the Catacombs, Co. Clare dating to the transition between the Bronze Age and Iron Age (Table 6.1). The votive material from Kilgreany Cave reflects wider European evidence for the special role of caves and rock clefts in Bronze Age religion (Harding 2000, 320). We can imagine people making trips, perhaps even pilgrimages, to Kilgreany Cave at particular times of the year or as part of particular events, and in the process entering the large open cavern and placing material on the floor. There is no evidence that objects were buried in the cave (though this is arguably a consequence of stratigraphic disturbance or antiquarian excavation techniques), which raises the prospect that entry into some caves was restricted either physically or by cultural taboos.

DEPOSITION OF POTTERY SHERDS

The most commonly occurring prehistoric pottery type in Irish cave assemblages is coarse, flat-based Late Bronze Age ware (c. 1100–800 BC). Sherds representing at least 40 different Late Bronze Age vessels have been recovered from seven different caves, with a particular concentration in caves of the Dungarvan Valley (Roche forthcoming). The most consistent patterning is the presence of small numbers of sherds that derive from several different vessels. In some instances these sherds may represent complete vessels that broke inside a cave and, because of complex formation processes and taphonomic factors, only a small number of sherds survived or were recovered. Another scenario is that originally only sherds were placed in caves and not intact pots. Based on present evidence and the pottery assemblage from Moneen Cave, Co. Clare, I am inclined to think that for Late

Bronze Age communities the deliberate deposition of pottery sherds in caves was a ritually significant act, and symbolically distinct to the deposition of a complete pot. Sherds conveyed a particular message or were more appropriate objects for the types of rituals being enacted.



*Figure 6.7 Location of Moneen Cave on Moneen Mountain, Co. Clare;
Moneen Cave chamber (Photos Ken Williams)*

Approximately 350 pottery sherds representing six vessels were

recovered from Moneen Cave (Figure 6.7). The assemblage can be dated to between 1100 BC and 1000 BC (Dowd 2013a). When sherds from one pot were refitted, differential weathering on the outer surface became apparent: the lower part of the vessel was far more weathered than the upper portion. This degree of weathering could not have taken place within the cave, and thus it appears that the vessel was in a fragmentary state outside the cave where it was exposed to different rates of weathering. For instance, some sherds may have been partially buried or covered over while others lay exposed on the ground surface. Sherds were then collected and brought into the cave; they were not simply thrown in. The distribution of pottery in the cave chamber, combined with the large size of some of the sherds, indicates that people entered the cave through a small opening in the roof and carefully deposited the sherds on or near a large upright rock that dominates the space. Oyster shells, a cattle rib with butchery marks (a joint of meat?), and an unmodified piece of antler were also deposited in the cave at this time (Table 6.1) (Dowd 2013a). The antler was heavily weathered and it too must have been exposed to the elements outside the cave. The pottery and animal remains date to the beginning of the Late Bronze Age but, like so many other sites, Moneen Cave had been used in earlier times. An antler hammerhead of Early Bronze Age date was also recovered (Figure 2.13; Table 6.1). As an isolated find it is difficult to assess what it represents. Is it a functional hammerhead or a ritually significant macehead? The rarity of such items in Ireland and the importance of deer in later prehistory imply that regardless of how the artefact had been used, its final placement in the cave may have taken the form of a deliberate structured deposit.

NO ORDINARY BURIAL PLACE

Arguably the richest Bronze Age burial yet discovered in Ireland was found in a cave at Knockane, Co. Cork in 1805. At present, six caves exist at what appears to be the site of the original discovery (Coleman 1944/5a, 8; Bottomley and Wilson 1968, 105), but whether the burial was found in one of these six caves or in another site since destroyed is unknown. In 2005, however, a local man identified this knoll and caves as the findspot of a skeleton found with gold (Cahill 2006, 332). The earliest account, published some 20 years after the initial discovery, stated that a 'curious discovery was made not far from Castle Martyr by a quarry-man, in consequence of his crow-bar having accidentally fallen through a fissure of the rock; he widened the aperture and descended in search of the instrument into a cavern, where he was not a little surprised to behold a human skeleton, partly covered with exceedingly thin plates of stamped or embossed gold,

connected by bits of wire; he also found several amber beads' (Crofton Croker 1824, 253). Though the description reveals more about the quarryman than the burial, the report suggests the presence of an extended inhumation of an adult; one might expect further comment if the remains were crouched, disarticulated or those of a child. Another antiquarian account, penned several decades later, described 'a human skeleton partly shrouded in a winding sheet of corrugated and embossed plates of pure gold connected by bits of wire; he also found some amber beads' (Fitzgerald 1858, 13–4). Interestingly, Fitzgerald goes on to say that the knoll at Knockane was known in the 19th century as *Carrig na hUagha* which can be translated as 'Rock of the Grave' or 'Rock of the Cave'.



Figure 6.8 Gold plate (S.A.1913:121) and amber bead (P.1948:306) from Knockane Cave, Co. Cork (Photos NMI and Thorsten Kahlert respectively)

Very little has survived of this important discovery apart from two artefacts and several antiquarian references (Figure 6.8). The human

bones from Knockane Cave were distributed as relics amongst local people as they were believed to be the remains of St. Colman (Crofton Croker 1824, 253). Most of the gold plates were melted down by jewellers. The single surviving plate, from what appears to have been an elaborate costume, resembles gold plates found in some British Wessex I graves, and in particular Bush Barrow, Wiltshire (Armstrong 1920, 43; Case 1977, 29; Taylor 1980, 49; Waddell 1990, 56; Eogan 1994, 2; 1999, 77; Cahill 2006, 272). Closer to home, the Knockane plate also resembles a gold foil disc from Sparrograda, Co. Cork in terms of decoration, manufacturing technique and compositional analysis (Cahill 2006, 270–4). The sole surviving bead from the cave consists of a natural nodule of amber that was perforated longitudinally with little sign of shaping, similar to those found with a sheet of gold plate from an Early Bronze Age grave at Little Cressingham, Norfolk (*ibid.*, 271). ATR-FTIR analysis has established a Baltic provenance for the amber (Lisa Moloney pers. comm.), further emphasising the importance of this Early Bronze Age burial as amber was not common in Ireland at this time.

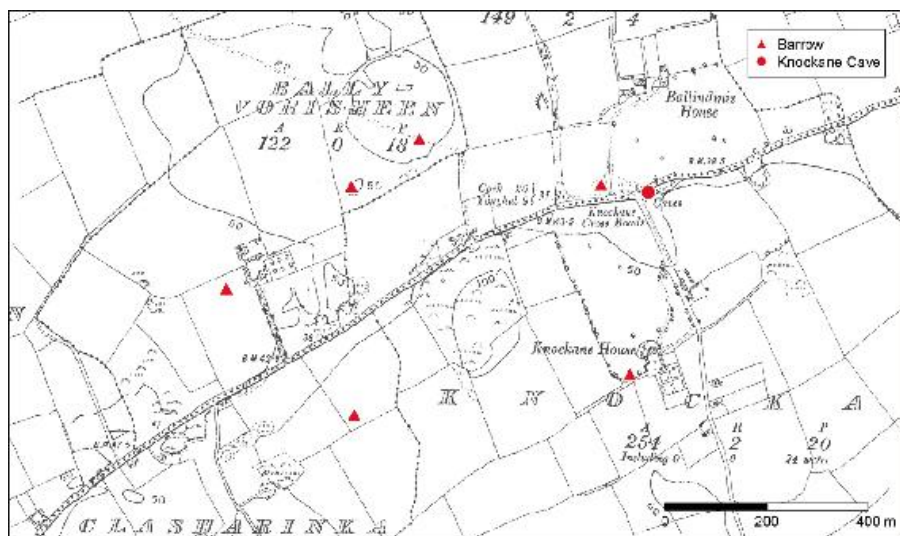


Figure 6.9 Knockane Cave relative to the distribution of mound barrows (Illustration Thorsten Kahlert)

The elaborate nature of the funerary costume implies the significance of Knockane Cave as a location appropriate for the interment of a high status and powerful individual. It is one of a small number of exceptionally rich Irish Bronze Age burials: only four burials are currently known to contain gold and three to contain amber (Waddell 1990, 21; Eogan 1999, 77–8). The exotic and

prestigious nature of the gravegoods from Knockane Cave, and the parallels with rich Bronze Age burials in England, suggest connections with distant lands which may have been a source of social power for the individual placed in the cave, or for those who arranged the interment (Bradley 2007, 157).

At Knockane we see a deliberate decision to inter the deceased in a cave rather than in a monument, raising questions about the six mound barrows clustered in the immediate vicinity of the cave which almost certainly contain Bronze Age burials (Figure 6.9). An additional barrow and burial also occurred in the area but their precise locations are no longer known. Antiquarian accounts report the discovery of cists at some of the barrows, one of which contained a miniature Early Bronze Age food vessel and three produced human bones. Documentation also records that 'several graves were discovered, cut in the solid rock, with human skeletons in them' to the south of the cave (Power *et al.* 1994, 52–4, 76). The mound barrows at Knockane seem to have been roughly contemporaneous with the cave burial but the funerary rites differ greatly, as do the gravegoods. Does this cave/monument arrangement mirror societal distinctions or relationships that existed within this particular Early Bronze Age community? Certainly Knockane Cave challenges any notion that cave burial was necessarily associated with people of lower social ranking (e.g. Atkinson 1968; Kinnes 1975; Schulting *et al.* 2010). In fact, ethnographic research reveals that in some cultures cave burial is reserved exclusively for wealthy individuals (Weiss-Krejci 2012, 14–5). Also worth noting is that in Mayan society elite cave ceremonies were based on the premise that caves 'had inherent powers to open lines of communication with spirits and ancestors ... that could not be duplicated in the built environment' (Stone 2005, 135).

SURROUNDED BY THE ANCESTORS

A Bronze Age concern with older ritual landscapes is reflected by the fact that many caves chosen to be used for funerary activities occurred in areas with concentrations of Neolithic monuments. The deliberate selection of Knockninny Cave, Co. Fermanagh as a place for Bronze Age burial must have been heavily influenced by its central location within a Neolithic funerary landscape. Three court tombs are located roughly equidistant from one another around the circumference of the hill on the north-western, eastern and south-eastern sides, while the cave forms a fourth 'cardinal point' on the south-western slopes (Figure 6.10). The Neolithic communities who constructed and used the tombs were keenly aware of the cave. A flint blade and flake of probable Neolithic date, as well as quantities of disarticulated and unburnt human bones (undated and now lost) from Knockninny Cave,

suggest that its religious significance originated during the Neolithic. In the Bronze Age a cremation burial was placed in the cave (see below), while two cist graves sealed by stone cairns were constructed on the summit of the hill immediately upslope from the cave (Wakeman 1879). The particular distribution of Neolithic and Bronze Age monuments strongly suggests that Knockninny Cave was a focal point for ritual activities on the hill spanning several millennia. The cave may have defined or influenced where precisely the Neolithic court tombs and Bronze Age burial cairns were constructed. By extension, the individuals interred in the cave must have been regarded as special or high status within their respective communities. What factors determined who was placed in the cave and who was placed in the monuments following death?

The 1875 excavations in Knockninny Cave revealed an artificial stone cist constructed against a natural niche in the cave wall, approximately 2.7m inside the main entrance (Figure 2.4) (Plunkett 1875/7, 466). The cist contained an Early Bronze Age encrusted urn inverted over cremated human bones that were identified at the time as representing two adults, including one male (Haughton and Macalister 1875/7, 482; Waddell 1990, 89). Only the pottery assemblage from Knockninny now survives and, in addition to the encrusted urn, includes ten sherds of a cordoned urn [identified by Waddell (1990, 89) and Brindley (2007, 342) as a vase urn] and one sherd of a possible vase urn of Early Bronze Age date (Figure 6.11) (Roche forthcoming). These sherds were found scattered in the wider vicinity of the cist. A substantial hearth was recorded on the cave floor at the base of an upright slab which supported the cist and cremation burial. In the southern part of the cave, disarticulated unburnt human bones of unknown date were found scattered through four different strata. These were identified in the 1870s as representing a large adult male, two adults, and one child (10–13 yrs old); the presence of three further individuals was also suggested. The skeletons of two of the adults were relatively complete and may indicate disturbed inhumation burials, but the other individuals were represented by just a few bones each (Haughton and Macalister 1875/7). These unburnt human bones, potentially representing up to seven individuals, most likely reflect Neolithic and/or Bronze Age funerary activities, but as the skeletal material cannot be located, this remains a matter of speculation.

involved public performance and participation, which then gave way to private or secret rituals inside the cave.

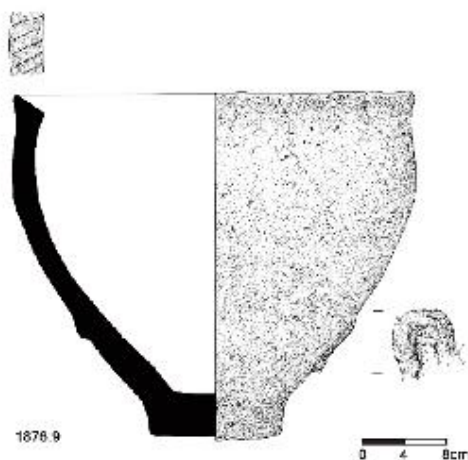
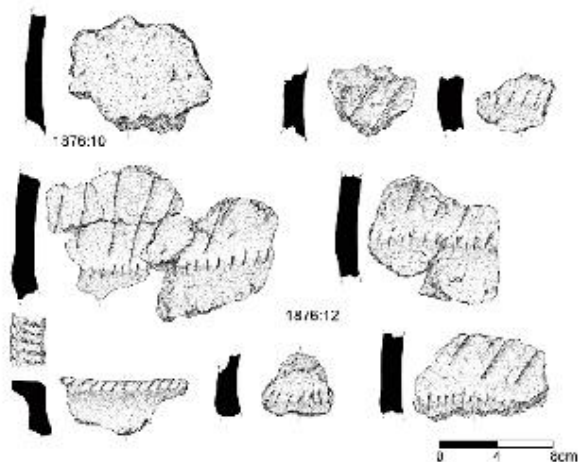
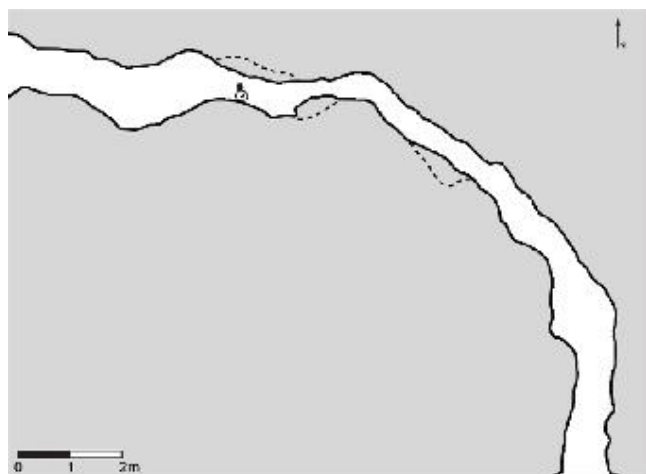


Figure 6.11 Plan of Knockninny Cave (Illustration Marion Dowd); sherd of vase urn (1876:10); sherds of cordoned urn (1876:12); questionable reconstruction of encrusted urn (1876:9) (Illustrations Malgorzata Kryczka)

Robber's Den, Co. Clare – where a Late Bronze Age adult female was discovered – bears some points of comparison with Knockninny Cave in terms of the distribution of monuments in the wider environs. The cave penetrates a limestone cliff which acts as a formidable physical division between an upper limestone plateau where a number of wedge tombs are located, and a lower plateau where *fulachtaí fiadh*, a promontory fort, at least twelve enclosures and several hut sites occur. The wedge tombs and *fulachtaí fiadh* indicate a thriving Bronze Age community in this part of the Burren, and many of the other undated sites are probably contemporaneous. It is plausible that the cliff demarcated a perceived boundary between the upper territory of the dead (wedge tombs) and the lower world of the living (settlement-type activities). Potently, it is *in* this actual boundary cliff that the cave is located and from where it commands expansive views over the entire lower plateau stretching out towards the sea. This liminal location may reveal something of the nature of the woman who was placed in Robber's Den at the end of the Late Bronze Age (Table 6.1). By this time the wedge tombs on the upper plateau would have been of considerable antiquity and the area may have been considered an ancient ritual landscape.

In 1989 cavers discovered the remains of an adult female aged over 35 years at the time of death, in the deepest part of Robber's Den, on the cave floor between boulders (Cremin 1991; Anderson and McCarthy 1991). The bones were not articulated but were concentrated in an area measuring 1m × 1m which suggested that the body was *in situ* but had been disturbed (Figure 6.12). Almost all skeletal elements were present with the exception of the pelvis and some of the lighter and smaller bones (Power 1991; Fibiger forthcoming). Two carved and decorated stone rings were found, one on top of the other, on the cave floor beside the skull. The morphology and hydrology of Robber's Den means that the body had not washed in (an active stream courses through the lower section of the cave). Based on current evidence, it appears that the remains were deliberately brought through the cave and into its deepest chamber. But was this a fleshed cadaver or a collection of disarticulated bones? The presence of smaller skeletal elements favours the former theory, but the difficulty of accessing the chamber in which the remains were found supports the latter.

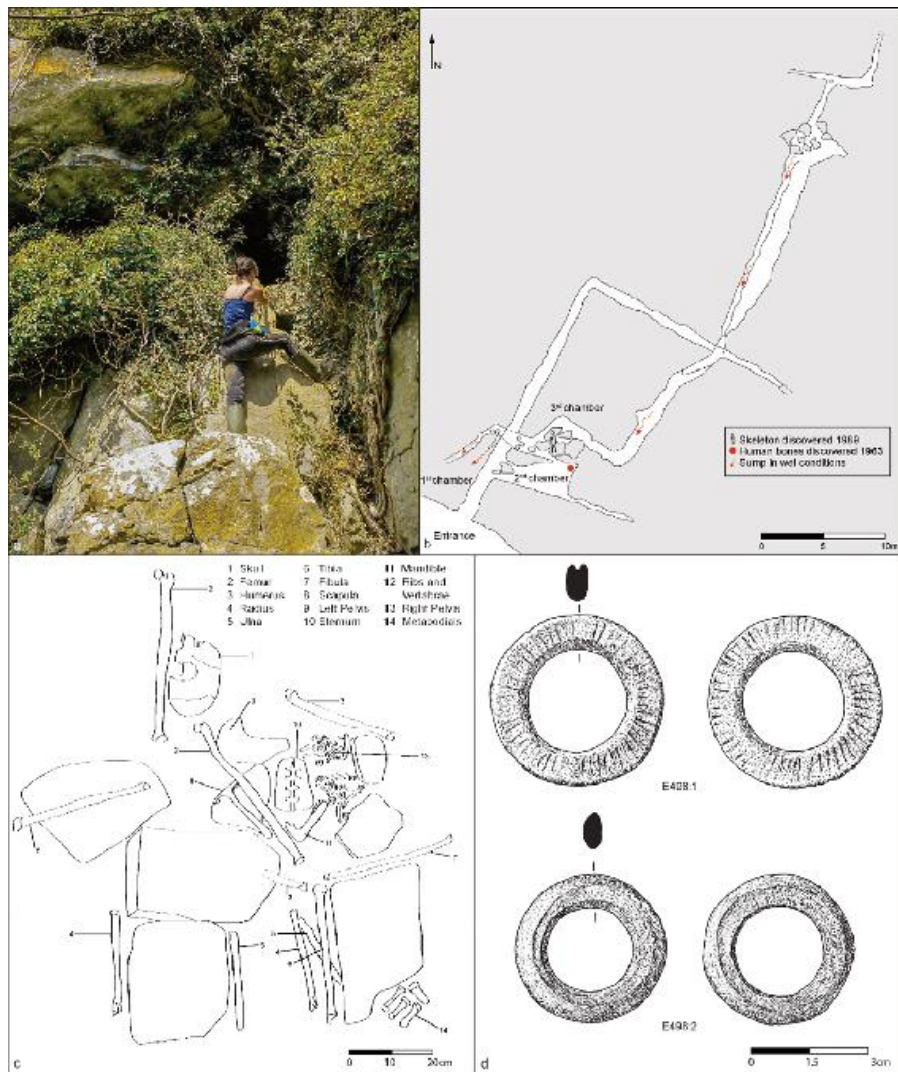


Figure 6.12 a. Climbing to the entrance of Robber's Den, Co. Clare (Photo Robin Sheen); b. plan of Robber's Den; c. sketch of female skeleton (Anderson and McCarthy 1991); d. stone rings (E498:1; E498:2) found beside skull (Illustration Malgorzata Kryczka)

TRAVELLING DEEPER INTO DARKNESS

Perhaps the most intriguing aspect of the Late Bronze Age skeletal remains from Robber's Den was the arduous journey that was undertaken to deposit the remains in the deepest chamber. To reach the small cave entrance it is necessary to scale a 4m vertical rock face (cavers almost always use ropes for this climb) which provides access into a small chamber (Figure 6.12). An opening in the floor here leads into a second chamber at a lower level. The most difficult part of the

journey is from the second chamber into the third chamber where the skeleton was found. This involves squeezing through an extremely tight, narrow, descending passage – one that has been described as ‘torturous’ by experienced cavers (Figure 2.12). The passage is only wide enough to admit a person of average weight and height, and even then the body is tightly wedged between the cave walls. Progress is slow, claustrophobic, and not for the faint hearted (Figure 2.12).

This was an extremely challenging journey, physically and mentally, that may have taken several hours to complete. If the Late Bronze Age woman was brought in as a fleshed corpse, the body would almost certainly have become repeatedly jammed in the narrow passage. A bag or basket of disarticulated bones would have been easier to transport by pushing the bundle ahead or dragging it behind. The deliberate decision to navigate this extremely difficult route is striking (and completely unnecessary if ‘burial’ was the sole objective). Rather, there was a clear intention involving great effort to place the remains of this woman as deep into darkness and as far underground as possible. It seems the narrow passage had been deliberately blocked with boulders after the remains had been deposited in the chamber (Peter Barry pers. comm.). This late prehistoric woman may have been considered a deviant or revenant and thus extreme measures were taken to ensure she was kept as far from the world of the living as possible. Alternatively, in her lifetime she may have been linked to caves and darkness in a real or symbolic sense, and it may have been considered fitting to inter her at a location that was meaningful for her and the community. Without doubt certain individuals were intimately familiar with the cave and had spent considerable time exploring its extent. Perhaps the woman found in the deepest chamber was one such person. She may have used the cave for religious purposes, such as ritual retreat (see below). Her bones may be the only indication of much more complex and lengthy ritualised interactions with this cave.

Journeying deep underground was also a feature of ritual activities at Brothers’ Cave, Co. Waterford. In the area furthest from the original entrance, at a distance of about 50m, a Late Bronze Age hoard comprising a socketed axe, socketed chisel and socketed sickle was discovered ‘lying with merely a slight wash of earth above them, on a space that could almost be covered with the hand ... They appeared to have been laid down, not accidentally dropped, ... they were not secreted, but open to the view of any passer-by’ (Forsayeth 1931, 180) (Figure 3.7). A necklace of at least 50 amber beads, probably also of Late Bronze Age date, was deposited in the wettest part of the cave, 25m inside the entrance (Figure 6.13). A substantial pool of water collects here after heavy rain, mirroring to some extent the bogs, lakes

and rivers that were the favoured places for votive deposition in the Late Bronze Age. That Brothers' Cave was transformed temporarily into a wet place may have enhanced the sense of otherness and liminality, particularly considering the distinctive subterranean context.

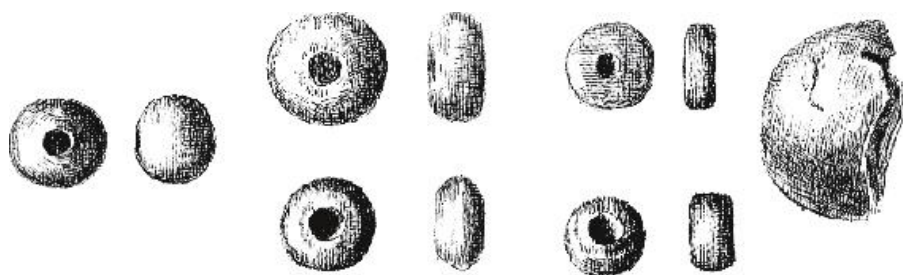


Figure 6.13 Amber beads (now lost) from Brothers' Cave, Co. Waterford (Illustration Colonel R. W. Forsayeth, reproduced by permission of the RSAI)

Late Bronze Age journeys into Brothers' Cave involved negotiating a vertical drop of almost 8m from the circular swallowhole (c. 7m diameter) on the ground surface to the cave floor beneath. A ladder or ropes may have been required to enable descent and ascent. Any person entering the cave would have been gradually lost from view if others were gathered on the ground surface overhead. To move through the cave, torch-light and slow careful movement were essential. Brothers' Cave is one of few caves of archaeological significance in Ireland that has speleothems. Late Bronze Age people would have passed by various beautiful and unusual formations, white and yellow in colour, which contrasted with the otherwise black setting. These were features – perhaps landmarks – not found in the world aboveground. People may have stopped to look at or touch the formations, and may have attempted to explain what they were or meant, and may have recognised people or objects in the shapes presented (similar to what visitors to show caves do nowadays). Brothers' Cave must have appeared magical and otherworldly. The two locations in the cave where the hoards occurred were quite specific and, like Robber's Den, reveal an intimate familiarity with the site that could only have been achieved through spending lengthy periods exploring underground. People may have waited anxiously outside for the safe return of the individual/s who had entered this strange realm bringing with them prestigious objects.

The idea that some ritual activities at caves involved people disappearing from view into darkness is powerful. In most cases only one individual or a small select group could have entered caves at any one time. Thus the potentially public nature of early stages of some rituals, such as the entire community walking to a cave entrance, may have been juxtaposed by the secret activities that took place inside the cave involving just a few people. Witnessing this disappearance into darkness, and waiting for individuals to re-emerge, is likely to have been dramatic. The length of time spent inside a cave may have increased the feelings of anticipation, expectancy, anxiety, trepidation, fear or mystery experienced by those outside. People aboveground were in the dark too. What was happening down there in the darkness? Who or what would be met in the cave? Why was the trip taking so long? Would s/he return? What would be the outcome? These were religious and spiritual excursions into darkness that must have transformed those waiting outside but especially the person who had entered the cave. Such journeys may have conferred her/him with greater power, status, reverence or respect if caves were perceived as places of the Otherworld where it was possible to commune with the spirit world. Emerging from darkness and returning to the world of the living may have been seen as akin to a rebirth: emerging with new knowledge or insights, emerging as a new and transformed person.

Caves provided a space where ritual specialists were separated both physically and visibly from the rest of the community. Moving deeper into caves away from public view may have been important and necessary, either because certain rituals demanded a level of secrecy and invisibility, or because certain ritual practitioners preferred to work in these environments. The silence and lack of external stimuli in deep caves naturally allow people to access altered states of consciousness and potentially gain deeper spiritual or emotional awareness. In Bronze Age landscapes, caves may have been one of the few places where solitude, quiet and an escape from other people were guaranteed. Bogs, uplands, woodland and areas of scrub were also attractive from this perspective, but they lacked an enclosed superstructure.

The Late Bronze Age hoards from Brothers' Cave and Kilgreany Cave also reveal something of a general avoidance of the subterranean world. Incursions underground were probably only made by certain individuals at particular times; the general population did not casually explore caves. This would explain why no effort was made to conceal the metalwork hoard in Brothers' Cave – it was safe underground and would not be disturbed. In the archaeological literature a distinction is made between sites where hoards *could* have been recovered ('utilitarian hoards') and contexts where hoards would have been

difficult or impossible to retrieve ('ritual hoards') (e.g. Bradley 1998). This distinction, however, is overly simplistic and only considers the physical ease with which material could be recovered. It fails to address the possibility that retrievability may have been mitigated by factors such as psychological, spiritual or social restrictions that controlled entry into religious sites. For example, unauthorised access to sacred places is strictly forbidden amongst Aboriginal communities in Australia and though these places are physically accessible, prohibitions are respected and adhered to (Tilley 1994, 48). In Late Bronze Age Ireland, Bourke (2001, 134) suggests that the retrieval of hoards would probably have been 'prohibited by powerful unspoken sanctions'. In a similar way, caves may have been generally perceived as 'no-go' areas, places to be avoided except by a select few.

A Late Bronze Age hoard from Kilmurry, Co. Kerry may reflect a deliberate decision not to enter a cave because of cultural taboos or religious sanctions (Figure 6.14). The hoard comprised a socketed axehead, a socketed spearhead, two plain penannular bracelets, and a decorated Hallstatt C penannular bracelet – an import from eastern France (Eogan 1964; 1983; Raftery 1994). The circumstances of the discovery were described in 1944: 'it was a large natural cave ... The location of the find was over either the roof or the side-wall of the cave. When found they were covered with about 2ft. of earth and stones and were resting together on a flat rock' (Top. files, NMI). The cave seems to have been destroyed in the interim, but the intentional deposition of the hoard in relation to the cave is apparent. What was the symbolic significance of placing this hoard outside rather than inside the cave? Was other material placed within the cave? What did entering or not entering Kilmurry Cave mean for the community who deposited this collection of prestigious metal objects?



Figure 6.14 Late Bronze Age hoard from Kilmurry Cave, Co. Kerry.

Socketed axehead (1944:302); socketed spearhead (1944:299); plain penannular bracelet (1944:301); penannular Hallstatt C bracelet (1944:300); plain penannular bracelet (1944:303) (Photo NMI)

ALTERING THE SUBTERRANEAN REALM

A feature that distinguishes the interaction between Bronze Age people and caves is the modification of underground landscapes. In no other prehistoric period is there any evidence that people sought to alter cave interiors. This characteristic of Bronze Age activities may reflect a desire to physically mark or record how humans engaged with this dark forbidding world. In some cases the modifications may be small-scale, such as the construction of a cist supported by a large upright slab in Knockninny Cave. Excavations in Glencurran Cave, Co. Clare, however, reveal alterations of a much grander scale (Dowd 2007b; 2009; in prep.).

Glencurran Cave was a focus for votive deposition in the Middle and Late Bronze Age, spanning a period of approximately 500 to 600 years (Table 6.1). Prehistoric material was confined to the outermost 60m of the cave. The first 16m of the passage, inside the entrance, had been choked with boulders and rock fall. It seems that during the Bronze Age a narrow path was cleared through this boulder choke to allow access into deeper parts of the cave. This was a significant undertaking that would have involved time, effort and the cooperation of several people. Deeper inside the cave, drystone walls were constructed to block two small openings that provide access into very low passages (one of these continues for almost 1km). These walls have been partially dismantled in recent decades, but originally would have served to contain and define this part of the cave. They seem to have demarcated the limits of the sacred area or the 'end' of the cave as it appeared to Bronze Age people. Certainly this zone was significant, as it was here that significant quantities of votive offerings were deposited (Figure 6.15).



Figure 6.15 Area of Glencurran Cave, Co. Clare where votive material was deposited during the Bronze Age (Photo Ken Williams)

Disarticulated human bones that must have been gathered from graves or mortuary contexts outside the cave were amongst the offerings left on the floor deep inside (Figure 6.16; Table 6.1) (Dowd 2009). There was a curiously disproportionate preponderance of clavicles, revealing that for these Bronze Age communities the clavicle was imbued with particular meaning. At least one individual, a 2–4 year old child, seems to have been placed in the cave as an intact cadaver. A localised deposit of organic material suggests the child had been laid out on a bed of rushes (*Juncus* spp.). A concentration of about 40 perforated cowrie shells (*Trivia mon. acha*) close to the skull probably represents some form of associated material, such as clothing that was adorned with shells or a piece of jewellery. Five hares were found clustered together near the cave wall, at least one of which dates to the Middle Bronze Age. Newborn domesticates were also deposited, notably piglets, calves and lambs. Some of these had evidence of burning, but several were of such young age they were of no nutritional value. Butchered cattle, sheep and pig bones indicated joints of meat. Scattered amongst the human and animal remains were sherds of Late Bronze Age pottery, lithics, amber beads, perforated shells and bone beads (Figure 6.16). The quantity of deposits and range of radiocarbon dates may indicate that the cave was a focus for votive deposition over a prolonged period, though alternatively, ceremonies may have been infrequent but intense.



Figure 6.16 Amber beads, shell and bone beads, fossil, worked bone, perforated wolf canine, stalagmite chunk, chert scraper, and human clavicles from Glencurran Cave (Photo Thorsten Kahlert)

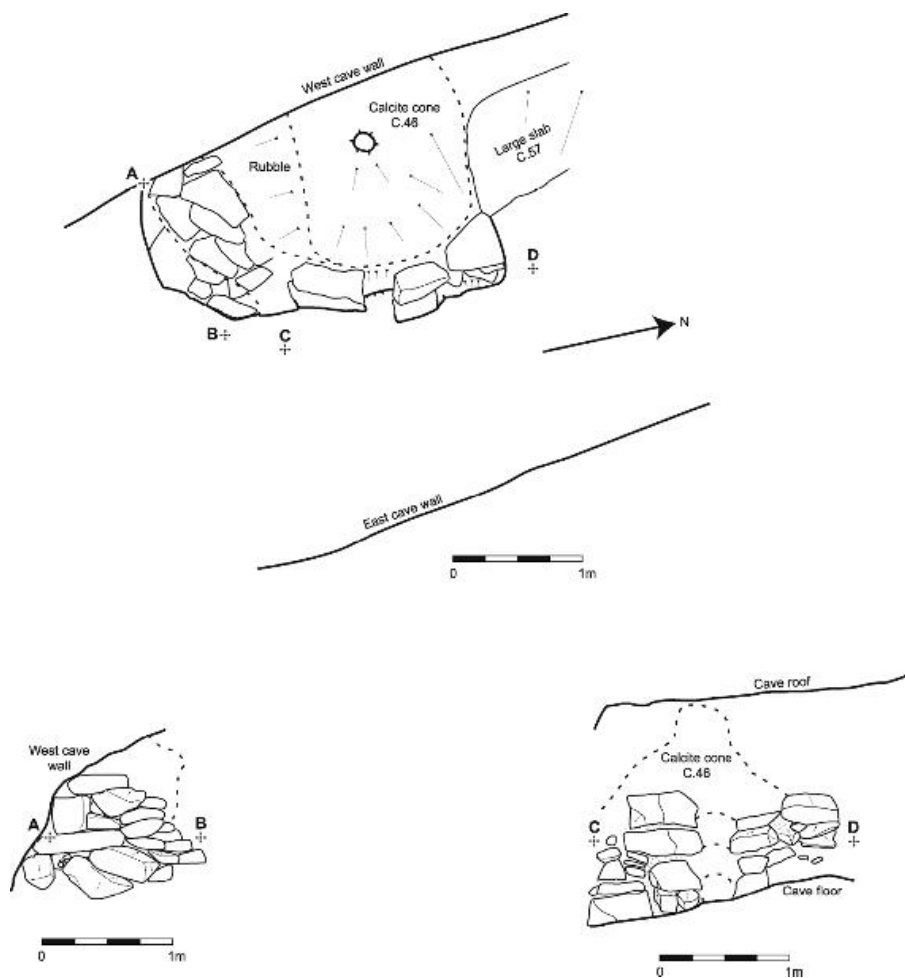


Figure 6.17 Plan and elevation drawings of stone structure in Glencurran Cave (Illustration Abigail Walsh and Sarah Halpin)

A unique late prehistoric structure reveals further the intimate familiarity certain individuals had with Glencurran Cave and their close observation of the materials available therein (Figure 6.17). Dating suggests the structure was built at the transition between the Late Bronze Age and the Iron Age, about the time the cave was abandoned as a ritual site. The precise location chosen to erect the structure is redolent with symbolism. It occurs in the twilight zone of the cave where the inward sloping passage ends (the part originally choked by boulders) and the level cave floor commences. This point marks a real physical transition: someone moving down the narrow cramped passage from the cave entrance can, for the first time, stand upright and look about. This important area may have been perceived as the point of ‘arrival’ into a more sacred zone. The narrow entrance

passage that had just been traversed might be viewed as liminal, navigating physically and spiritually the transition from the world outside the entrance to the deep darkness of the interior.

This was a split-level structure. The lower section consisted of a sunken drystone chamber abutting the cave wall over which a semi-circular drystone wall had been built (Figure 6.17). The interior of the stone structure (c. 2m × 1.5m × 2m deep) had been filled with layers of sterile, wet, creamy, decayed calcite that had been dug up from the cave floor deeper inside the cave (extraction pits are still visible). Some of the fills included chunks of hard calcite that had been cleaved off the cave walls and ceiling. The chisel marks themselves are still visible in places, as are finger flutings where soft calcite was scraped off cave walls. When the hollow stone structure had been filled to the top with dozens of layers of calcite, the structure was sealed by a tall cone of moulded calcite that almost touched the cave roof. In 1986 a caver found a human mandible within the structure but it cannot be located at present (Wilson 1986), and during our excavations a honestone was found between the construction stones of the upper portion of the structure. Very little was recovered from between the layers of calcite inside the drystone walling, with the exception of a small bronze ring which closely resembles a Bronze Age example from Dún Aonghasa fort, Co. Galway (Cotter 2012, 48–9). A butchered cattle metatarsal (UBA-19269) and a rib of a large mammal, probably cow (UBA-19265), were recovered from the lower calcite fills; both returned dates at the interface between the Late Bronze Age and Iron Age (Table 6.1). These bones, like the bronze ring, may have been deliberately placed between layers of calcite.

The Bronze Age people who created this structure took great care not to dirty the creamy white clay: when we excavated the feature in 2008 the clays were pristine in colour but quickly became muddied from handling (Figure 6.18). It was almost impossible to keep the deposits clean. That Bronze Age people were even aware of the presence of these rich creamy layers reveals the time that was spent exploring and observing the cave. The colour of the calcite is strikingly different to the grey, brown, and black clays found in the outside world. The contradiction of finding such deposits in an otherwise black environment cannot have been lost to prehistoric people and thus the clays may have been perceived as wholly otherworldly and remarkable. The drystone and calcite-filled structure in Glencurran did not serve any practical function, though it clearly held religious and symbolic significance. That it was constructed at the end of a 500–600 year period of ritual use of the cave may indicate that it was part of some form of closing ceremony.



*Figure 6.18 A chunk of calcite from the stone structure in Glencurran Cave
(Photo Marion Dowd)*

INTIMATE FAMILIARITY AND RITUAL RETREAT

The level of familiarity with the internal micro-landscape of Glencurran Cave reflects that certain Bronze Age people spent long periods of time underground. They discovered the creamy calcite deposits towards the back of the cave, they gathered stones to build the split-level structure, they constructed walls and cleared blocked passages, they removed calcite chunks from cave walls, and scraped away soft calcite with their fingers. This level of awareness and knowledge could not have been acquired during brief trips. Rather, it reveals extended periods of time spent in the cave – days, weeks, or repeat visits each lasting several hours. A parallel for such intimate familiarity with the underground is found in parts of Palaeolithic Europe. Bahn (1997, 35) contends that visits into deep caves were extremely rare events during the Palaeolithic and only for brief durations. I disagree. Whether in Palaeolithic Europe or Bronze Age Ireland, lengthy sojourns in caves are necessary to observe and notice the unique subterranean features, characteristics and potential of a site. The absence of natural light, combined with the shadows created by flickering torches, mean that it takes a long time to become familiar with the micro-landscape of a cave: things appear differently all the time. This was apparent during the 2004–2009 excavations at Glencurran Cave (Dowd 2007b; 2009). Many natural features inside the cave were only noticed during the later seasons of excavation. The longer an archaeologist spent underground ‘immersed’ in the cave, the more s/he noticed, particularly in the immediate vicinity of their

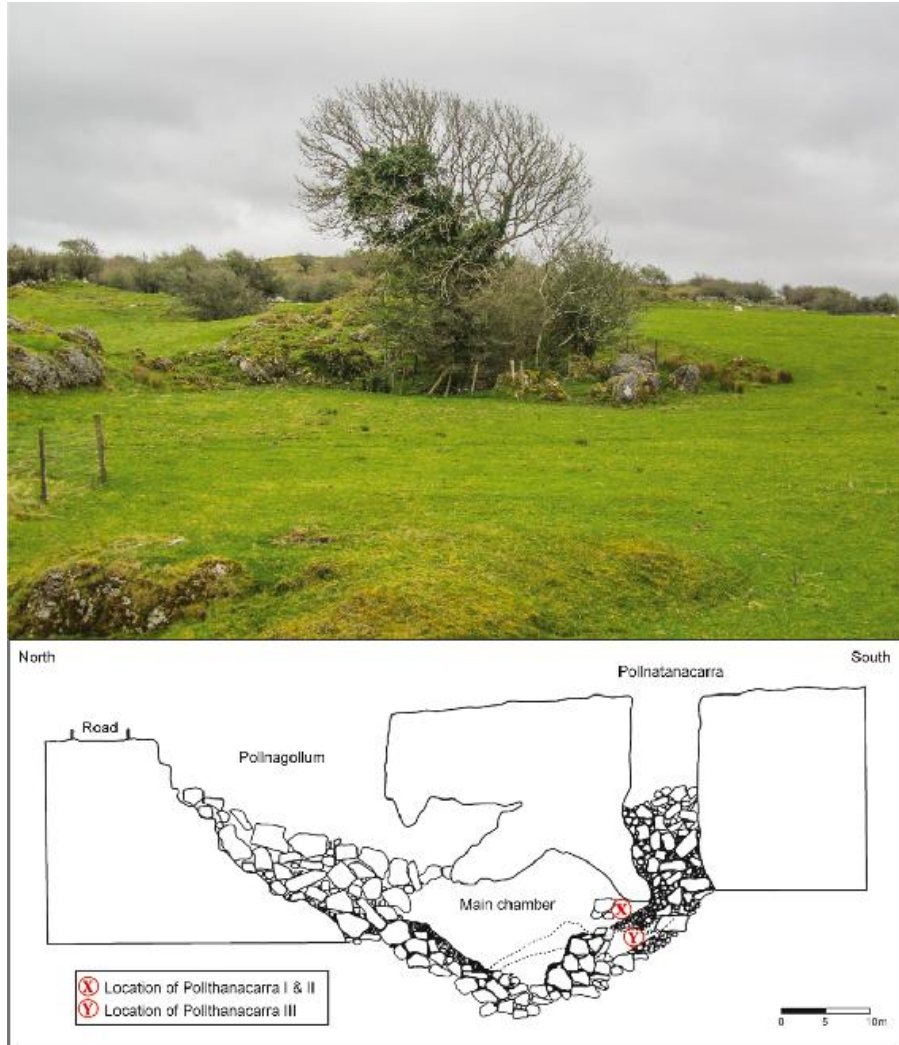
particular excavation trench. Light contributed significantly to what could be seen. The harsh glare of the generator-powered lighting often obscured features that were best observed with low torch light or in shadow. Different parts of the cave had a different morphology and character. Certainly those of us who worked on all seasons of the excavation found that we had a much deeper understanding of the cave and its peculiarities in 2009 compared to when we had commenced in 2004.

Together with the evidence described above, a number of artefacts found at Glencurran Cave suggest that individuals were stationed inside the cave for periods of time. This, I believe, was a form of ritual retreat undertaken by one person (or at most a small number of people). Quite possibly ritual retreats were associated with acts of votive deposition, but they were probably also relatively solitary events and thus did not take place at the same time as the construction works which would have involved several people. The archaeological material suggestive of ritual retreat includes whittled and worked animal bones; attempted and partially perforated seashells; and a small collection of Bronze Age lithics including knapping debris. Some of the butchered animal bones may reflect food consumed by a retreatant. At first glance this collection of material resembles habitation debris and small-scale manufacturing activities. However, the finds occurred in an area of the cave that is completely shrouded in darkness. It may be that the manufacture of objects by a ritual practitioner within the sacred precincts of a cave conferred on the finished product a particular value. Objects may have been removed from the cave and kept in the world outside. If so, there was a two-way movement of objects and materials in and out of Glencurran Cave. Alternately, making objects may have been the outcome of a ritual retreat and what was experienced during that time, for instance, the result of entering an altered state of consciousness, or an attempt to embody the insights that had been gained in the quiet solitude of the cave.

SWALLOWING UP THE DEAD: THE EVIDENCE FROM SWALLOWHOLES

Swallowholes that consist of circular openings on the ground surface that lead via vertical descents into extensive caverns were sometimes places of public ritual. At Brothers' Cave and OonagLOUR Cave spectators may have gathered around the swallowholes while ritual practitioners descended into darkness. People potentially also gathered around openings to cast votive material down into the dark depths of a cave. One site of significance during the Bronze Age was Pollthanacarra, Co. Fermanagh – a vertical swallowhole 8m in diameter and 20m deep that connects with the more extensive Marble

Arch Cave system (Figure 6.19). In 1972 cavers recovered human bones scattered through several strata at the base of Pollthanacarra which resulted in a small geological excavation (Doughty 1995). A recent analysis of the human remains has revealed the presence of an adult female, two adult males and an adult of undetermined sex (Fibiger forthcoming). Though only 137 human bones were retrieved, the presence of most anatomical regions and mainly large skeletal elements indicates that the four individuals were probably deposited as intact fleshed cadavers. One human skeleton was described as occurring in a relatively articulated state lying on her/his front with the face downwards and the hands under the skull (Philip Doughty pers. comm.). A radiocarbon date at the time of excavation suggested a possible Neolithic horizon (Dowd 2008, 305), but recent AMS determinations indicate that at least three of the individuals date to the Early Bronze Age (Table 6.1). Of note is that the human remains were unburnt, which is most frequently the case with Irish caves, but contrasts with Bronze Age burials aboveground where cremation was dominant (Waddell 1990). A faunal assemblage representing at least ten cattle, five sheep/goats, seven pigs, two dogs/wolves, two red deer and three hares was also recovered from Pollthanacarra (Jones and Dixon 1973; Doughty 1995). The dates of these remains are unknown.



*Figure 6.19 Photo and section drawing of Pollthanacarra, Co. Fermanagh
(Photo Marion Dowd; Doughty 1995)*

Doughty (1995, 59) suggested that the four individuals from Pollthanacarra had been thrown into or fell into the swallowhole, and that the animals had fallen in. Though it is deep, people could have climbed back out relatively easily if they had been thrown in alive; these Bronze Age individuals were almost certainly dead before entering the cave. The radiocarbon dates are somewhat staggered suggesting distinct phases of activity rather than the convenient disposal of victims of a single event such as warfare or illness (Table 6.1). In fact, no traces of violence, injury or disease were noted on any of the human bones (Fibiger forthcoming). Furthermore, it may be significant that 13 of the 29 animals (or 45%) were immature

domesticates. A more plausible theory is that animals and human bodies were ritually deposited into Pollthanacarra swallowhole, replicating to some extent the Neolithic evidence from Britain (Lewis 2000; 2011). Only further excavation will clarify the nature of activities at this site but it raises the possibility that other swallowholes were similarly used – evidence which is currently quite rare in Ireland.

LIVING IN CAVES: EVIDENCE FROM THE COAST

It is not until the Bronze Age that we find the first convincing evidence of cave occupation in Ireland. This corresponds with wider European trends which reveal that caves were inhabited on a long-term domestic basis as well as for shorter periods related to activities such as transhumance (Harding 2000, 54–5; Manem 2012). Part of the difficulty in identifying settlement activities in caves has been highlighted by recent archaeological excavations in Oweyberne Cave 3 on Rathlin Island, Co. Antrim (McConkey 2012, 198–205). Much of the evidence was not diagnostic (hearths, cobbling); many features would have been missed by antiquarians (stakeholes); and in older investigations some material (debitage) may not have been recognised as archaeological. Factors such as these must contribute to the present paucity of prehistoric settlement evidence from Irish caves.

The principal structural features noted in Oweyberne Cave 3 included a layer of cobbles, two hearths, a pit containing limpet shells and two concentric arcs of stakeholes and postholes that represent some form of windbreak, barrier or internal division. Charcoal from two of the stakeholes, as well as from a hearth outside the cave entrance, returned Middle and Late Bronze Age dates (Table 6.1) (McConkey 2012, 202–3). The lithic assemblage consisted primarily ofdebitage indicating knapping activities within the cave, though finished tools such as a convex scraper were also present. A bronze ring and a lignite bracelet fragment may relate to this period too (Figure 6.20). The small assemblage of 24 pottery sherds represented five different vessels: a food vessel, vase urn and tripartite vase of Early Bronze Age date; as well as two Middle Bronze Age domestic urns (Roche forthcoming). Layers of clay, stone, sand, ash and charcoal suggested the cave had been used on an intermittent but repeated basis, further supported by the spread of radiocarbon determinations and the pottery dates. Evidently Bronze Age people slept in Oweyberne Cave 3, knapped flint there, prepared and consumed shellfish, stored and cooked food in pots, lit fires and organised the space. While the evidence is largely in keeping with short-term occupation, alternate activities may have occurred at particular times. For instance, the vase urn sherd and an undated

human finger bone may reflect some form of funerary or ritual activity, and the bronze ring is almost identical to the example from the Bronze Age ritual structure in Glencurran Cave (see above). Of course, domestic occupation and ritual activities in the cave were not necessarily mutually exclusive.



Figure 6.20 Artefacts of Bronze Age or possible Bronze Age date from Oweyberne Cave 3, Co. Antrim. Sherd of Early Bronze Age tripartite vase food vessel (AE/04/96:07); flint pressured-flaked object (AE/04/96:22); lignite bracelet fragment (AE/04/96:01); bronze ring (AE/04/96:03) (McConkey 2012)

Two other sites on the Antrim coast – Chimney Cave and Potter’s Cave – also appear to have been used for short-term occupation or shelter, plausibly by people travelling to the beach to avail of marine resources or the flint nodules that are abundant in the adjacent cliffs. Caves in this area may have been used for similar purposes in the Mesolithic and Neolithic (Chapters 4 and 5). During the 1935

excavation at Chimney Cave a substantial collection of lithics was recovered of which 86 can be located at present (Jackson 1936a; 1938). The assemblage consists primarily of irregular blades produced with a simple technology typical of the Bronze Age. The presence of 12 primary cortical flakes and 16 flakes with smaller but significant remnants of cortex, and the absence of small debitage and cores, suggests that knapping took place in the vicinity of, but not inside, the cave (Woodman forthcoming). In the lowermost strata of Chimney Cave where the lithics were found, Jackson (1936a) recorded the presence of hearths, a layer of burnt earth, animal bones, fish bones, charcoal and concentrations and layers of seashells. It would be tempting to assign these traces of occupation to the Bronze Age, but this can only be determined by further excavation or radiocarbon dating programmes.

Potter's Cave is quite close to Chimney Cave, another multi-period site with a pronounced phase of Early Medieval usage (see Chapter 8). The interior of Potter's Cave has never been investigated but excavations in the 1930s outside the entrance revealed intense activities, some of which are Bronze Age in date. Three sherds of a domestic Middle or Late Bronze Age vessel were recovered (Kyle forthcoming), possibly from what was known as the 'third occupation layer' (Gaffikin 1934). In addition, an assemblage of over 120 pieces of worked flint was retrieved from various layers and represents a simple *ad hoc* knapping strategy typical of the Bronze Age. Core fragments, flakes and debitage were present and some pieces were burnt (Woodman forthcoming). Flint knapping may have taken place outside the cave where there was good light while the interior was used for eating and sleeping – similar to what was suggested by the lithic patterning at Chimney Cave. Other material of possible Bronze Age date from Potter's Cave includes hearths, charcoal layers, animal and fish bones, and abundant quantities of seashells. A charcoal sample and a pig bone found outside the cave at depths of 3m and 2.75m respectively both returned Late Bronze Age dates (Table 6.1). A third radiocarbon date on charcoal indicated Iron Age activities (see Chapter 7). Portbraddan Cave, yet another site on the Antrim coast, may have been used in a similar manner to Chimney Cave and Potter's Cave, as tentatively suggested by a single radiocarbon date on a limpet shell (Table 6.1). No prehistoric pottery was recovered from Portbraddan, however, and the lithics appear to pre-date the Bronze Age, but much of the occupation debris is undiagnostic and undated (e.g. hearths, animal bones and seashells).

Bronze Age lithics have been recovered from a number of other caves around the country but, interestingly, most of these are also coastal sites situated in proximity to beaches where flint nodules and

pebbles could have been sourced. In these instances it seems that primary reduction and simple *ad hoc* knapping took place within the shelter of caves; in most instances finished items were removed to another location. For example, a collection of 82 pieces of flint were discovered in 1929 in a small sea cave or rock shelter at Dunbur Head on the Wicklow coast (Martin 1932, 58) (Figure 6.21). The material represents a simple flake industry that made use of locally available beach pebbles. The lithics were in relatively fresh condition though some pieces were burnt. A number of simple platformed cores that had been worked in an expedient manner, a blade core, two blades and a large number of complete and fragmentary flakes (approximately 40% of the latter were primary cortical flakes) were present, but no retouched tools. The composition and technology is typical of the discard of Bronze Age industrial debris (Woodman forthcoming). At Portrane on the Dublin coast, five flint flakes of Neolithic or Bronze Age date were recovered from a cave in the 1930s (Figure 6.21) (Woodman forthcoming). Four of the items were heavily rolled, possibly because the caves here are inundated by the sea at high tide. It is difficult to say anything meaningful about what these items might represent, particularly as they are likely to be *ex situ*.

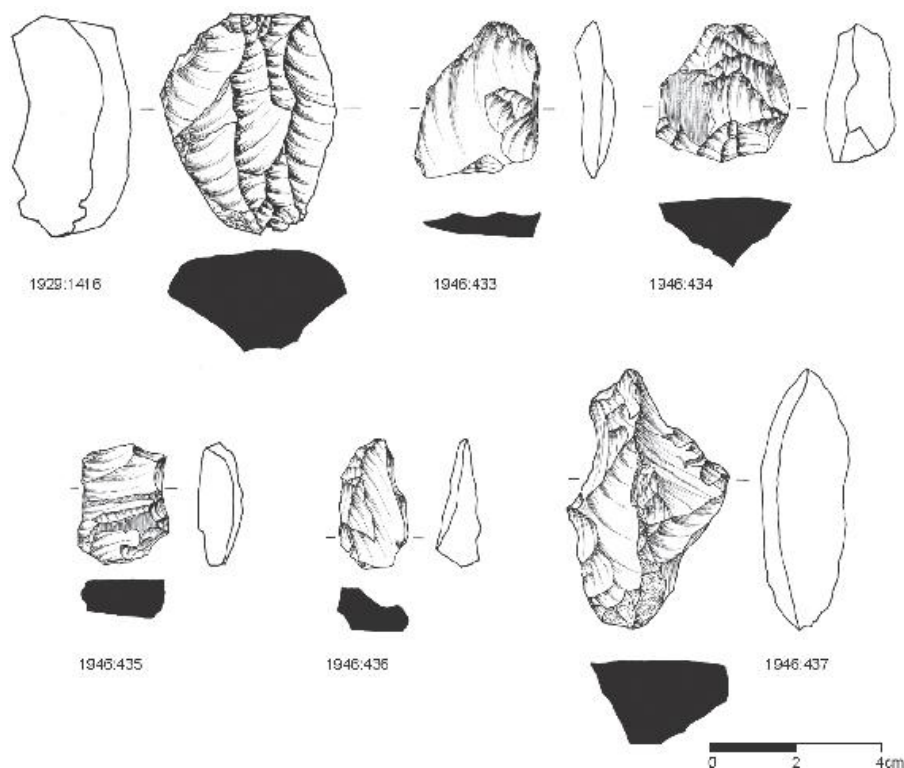


Figure 6.21 Burnt flint single-platformed core (1929:1416) from Dunbur

rock shelter, Co. Wicklow. Flint flake (1946:433) and water-rolled flint flake fragments (1946:434-437) from cave at Portrane, Co. Dublin
(Illustration Malgorzata Kryczka)

Moving away from coastal sites, Ross Island Cave, Co. Kerry was used for episodic occupation or shelter during the Early Bronze Age, probably linked to the large-scale copper mining and associated settlements some 400m to the south (O'Brien and Comber 2008; O'Brien 2004). Stone hammers – one of which was comparable to examples from the Ross Island mines – as well as a small assemblage of worked flint and chert were recovered. The assemblage of 14 lithics included seven scrapers, flakes and debitage produced using the typical Bronze Age bipolar 'smash-and-see' technique. Hearths inside the cave entrance, and some of the faunal remains recovered during excavations, may also reflect prehistoric activities. While it was surmised that the cave had been used by hunting parties or 'woodland hunters' (O'Brien and Comber 2008, 44), there is little supporting evidence for this and it is not reflected in the faunal assemblage. The relatively high number of scrapers amongst the lithics, however, suggests that specialised tasks or crafts took place in the cave which may or may not have been associated with the adjacent copper mines and Beaker period settlement.

THE END OF A GOLDEN AGE

Caves figure relatively prominently in Bronze Age ritual and religion, in part building on established Neolithic traditions and possible associations with the ancestors. That human bones from caves are almost always unburnt, in contrast to the popularity of cremation at this time, may point to wider cosmological beliefs about the underworld and its relationship to monuments and the dead. Worthy of future study is an exploration of why some caves were used for seemingly utilitarian purposes while others were largely dedicated to religious activities. Or is the distinction as clear-cut as it currently seems? Perhaps some of the coastal sites discussed above were used for ritual retreat and seclusion. And perhaps some finds from ritual sites, such as pottery and lithics, reflect occasional appropriation of sacred sites as places for refuge and shelter. Caves were potentially ideal hideaways: it may have been considered unthinkable that anyone would inhabit such a potent sacred place. By the Late Bronze Age, many caves were highly charged foci of ritual activity, possibly places of spiritual retreat and sites of pilgrimage. What is remarkable is how rapidly that significance diminished after 600 BC.

Chapter 7

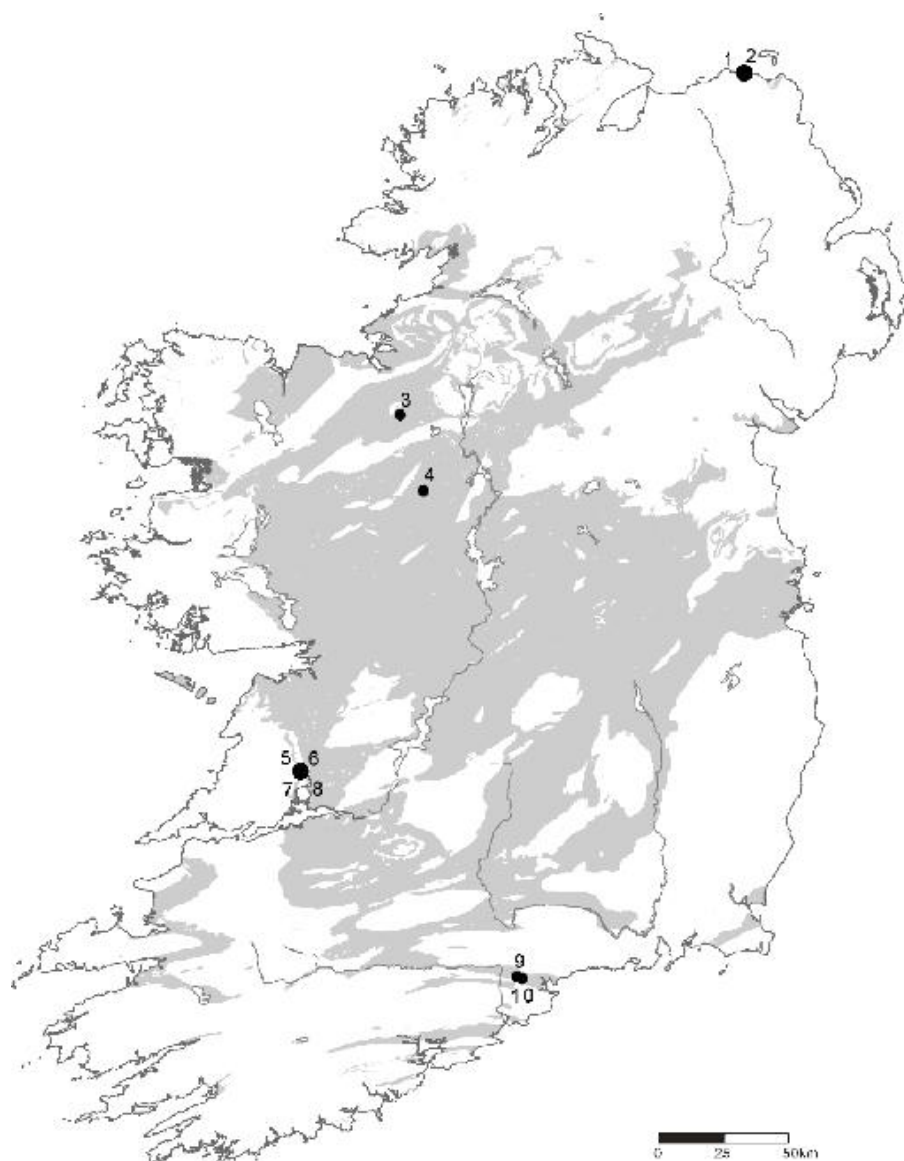
Eyes Full of Darkness the Iron Age (600 BC–AD 400)

Plato's well-known *Allegory of the Cave* (The Republic VII) depicts those who are philosophically unenlightened as prisoners chained from birth inside a cave, who believe that the shadows they see and the echoes they hear reflect reality. Emerging from the cave is a metaphor for achieving enlightenment regarding the true nature of reality. Returning to the cave, the prisoner finds, once more, 'his eyes full of darkness' (Jowett 2008, 179). Plato penned this allegory at a time equivalent to the earlier part of the Irish Iron Age, a period in archaeological research that could be described as full of darkness and difficult to see – an 'enigma' according to Raftery (1994).

The problematic nature of the Irish Iron Age has as much to do with the archaeologist as with the archaeology. Traditionally the focus of research has been on royal sites, ritual deposition, the question of the 'Celts', and influences from the Hallstatt and La Tène world. The surviving material culture is in many ways an 'archaeology of the non-routine' (Armit 2007, 133). It is a period without pottery or diagnostic domestic assemblages; there is a northern distributional bias in much of the artefactual record; and metalwork does not occur in domestic or burial contexts (Becker 2009, 353). Identifying evidence for the farming communities that made up the vast majority of the Iron Age population had not been satisfactorily tackled, though in recent times this has changed significantly as a result of discoveries made by infrastructural and commercial archaeological projects (Becker *et al.* 2008; Becker 2009). In general, settlements are few and hillforts – once thought to be Iron Age – are mostly characteristic of the Bronze Age. An important pattern is emerging. Much of the material culture of the Iron Age is not markedly different from the Late Bronze Age material that preceded it or the Early Medieval material that followed. This is further complicated by the fact that many Iron Age habitation sites are masked if not destroyed by Early Medieval occupation activities, a product of continuity of settlement at certain locations (e.g. Ó Drisceoil 2007). As a consequence of the various issues there is

often no expectation of encountering the Iron Age on excavations, and activities of this period are routinely only recognised at post-excavation stage. Radiocarbon dates are frequently the sole indicator of an Iron Age horizon. So too with the archaeological record from caves.

The evidence from caves comprises a limited number of radiocarbon dates from human and animal bones and just three artefacts of Iron Age, or probable Iron Age, date – two antler parallelepiped dice and a bronze horse-bit fragment (Figure 7.1). It is difficult to interpret the activities represented by such a meagre collection, but there is some suggestion that votive deposition of disarticulated human and animal bones, as well as artefacts, took place at caves, particularly sites that had been used for ritual purposes in the Late Bronze Age or at even earlier times. Evidence that caves were used for settlement or other secular purposes is entirely absent. There is also nothing to suggest that caves were places of burial which contrasts with Britain where a number of cave sites have produced Iron Age interments. However, some of the Irish finds may correlate with the British evidence for votive deposition of material culture and disarticulated human and animal bones in caves (e.g. Whimster 1981, 35; Saville and Hallen 1994; Chamberlain and Williams 2000a; 2006; 2001; Bryant 2011) – though in several cases human remains from British caves have been dated by association alone which is extremely unreliable. The range of ways in which caves were used in Britain expanded following Roman colonisation. Almost 100 sites have produced Romano-British material relating to domestic occupation, shelter, storage, workshops, hideaway, burial and veneration (Branigan and Dearne 1992). This rich diversity of information from Iron Age and Roman Britain lies in stark contrast to the evidence from its neighbouring island.



- | | |
|---------------------|-------------------|
| 1 Potter's Cave | 6 The Catacombs |
| 2 Boat Cave | 7 Bats' Cave |
| 3 Kesh Caves | 8 Elderbush Cave |
| 4 Cave of Crúachain | 9 Brothers' Cave |
| 5 Barnlick Cave | 10 Kilgreany Cave |

Figure 7.1 Caves with material of Iron Age or probable Iron Age date

Site	Material	$\delta^{13}\text{C}$	Lab code	Measured radiocarbon years (BP)	Calibrated radiocarbon date (2 σ)
Antrim, Boat Cave (Peter Woodman pers. comm.)	Human, Neonate/infant (0–1 yr)	-18.5	UBA-6710	1854 $\pm$ 32	81–236 AD
Antrim, Potter's Cave (Peter Woodman pers. comm.)	Charcoal	-27.0	UBA-6709	1747 $\pm$ 33	214–396 AD
Clare, Bars Cave (Woodman <i>et al.</i> 1997)	Red deer, Maxilla	-18.8	OxA-3703	2270 $\pm$ 60	415–150 BC
	Horse, Metatarsal	-19.6	OxA-3700	1575 $\pm$ 60	249–535 AD
Clare, the Catacombs (Carlen <i>et al.</i> 2012)	Red deer, Astragalus	-22.8	UBA-0543	1833 $\pm$ 27	122–245 AD
Clare, Elderbush Cave (Woodman <i>et al.</i> 1997)	Wolf, Radius	-21.5	OxA-3724	1730 $\pm$ 60	135–423 AD
Sligo, Coffey Cave, Kesh (M. Dowd)	Human, Adult R molar	-2.33	GrA-22112	2070 $\pm$ 50	204BC–30 AD
Sligo, Plunkett Cave, Kesh (Carlen <i>et al.</i> 2012; Woodman <i>et al.</i> 1997)	Red deer, Shed antler	-21.28	UBA-0545	2088 $\pm$ 22	174–47 BC
	Horse, Tooth	-21.8	OxA-3707	1580 $\pm$ 55	389–602 AD
Waterford, Kilgreany Cave (Carlen <i>et al.</i> 2012)	Red deer, Phalanx	-23.39	UBA-10551	1979 $\pm$ 19	30 BC–68 AD

Table 7.1 Iron Age radiocarbon dates from caves

NO ONE HOME

There is little to suggest that caves were occupied during the Iron Age, though as with sites aboveground, features and stratification may be masked by subsequent Early Medieval activities. Disturbed stratigraphy, antiquarian excavation techniques, and insufficient radiocarbon dating of domestic debris (such as charcoal, seashells and animal butchery waste) are likely to contribute to the paucity of evidence. One piece of information, however, highlights the potential of future radiocarbon dating projects. Charcoal fragments (species not identified) that were recovered during excavations in the 1930s at Potter's Cave on the north Antrim coast recently returned a date of 1747 $\pm$ 33 BP (Peter Woodman pers. comm.) (Table 7.1). The original excavation took place outside the cave entrance and the charcoal sample was retrieved from the deepest archaeological stratum (Layer O3) at a depth of 1.8m below the 1930s ground surface. This stratum was described as an 'occupation layer' and contained two charcoal seams, animal bones, worked bone, limpet shells and struck flint (Jackson 1933a; 1934a). While all the material in Layer O3 is not necessarily contemporaneous with the charcoal sample, the date raises the possibility of Iron Age settlement at the cave. Only further excavations will reveal whether this was the case: certainly there is evidence for occupation at Potter's Cave during the Early Medieval period (see Chapter 8).

A SKULL AND A TOOTH: HUMAN REMAINS OF IRON AGE DATE

Despite the random nature in which human remains from caves have

been selected for radiocarbon dating projects (Chapter 3), thus far only two human bones have returned Iron Age dates (Table 7.1). The two samples – from Boat Cave, Co. Antrim and Coffey Cave, Kesh, Co. Sligo – suggest the deliberate deposition of disarticulated human bone, particularly when considered within the wider context of votive deposition of human skeletal remains at sacred natural places in the late prehistoric landscape including lakes (e.g. Loughnashade, Co. Antrim), ‘artificial’ natural places (e.g. the King’s Stables, Co. Armagh) and bogs (e.g. bog bodies). In relation to the two caves, the bones were isolated finds with no evidence to suggest that they represented disturbed burials or were associated with larger collections of human skeletal remains.

The skull of a neonate or young infant from Boat Cave – a small coastal site less than 1.5km east-north-east of Potter’s Cave – was discovered during excavations in 1935 (Jackson 1936a). The infant was less than one year old at the time of death (Fibiger forthcoming). The facial bones were absent, potentially the result of differential preservation or taphonomic factors. The cranium was discovered beneath a deposit of charcoal which was one of a substantial series of ‘burnt layers’ that measured 0.9m in overall thickness. These successive lenses of charcoal and ash represent intensive activities, but many of the artefacts retrieved from the strata (such as Souterrain Ware and a bone comb) were of Early Medieval date and represent occupation debris (Jackson 1936a; 1938). Stratigraphic disturbance due to the intense early historic usage of Boat Cave is almost certain and thus it is difficult to discern the nature of Iron Age activities at the site.

In terms of human skeletal development, skulls are not fused at infancy and thus the remains from Boat Cave suggest the deposition of a fleshed cranium during the Iron Age which may reflect wider European traditions associated with the cult of the head (Raftery 1994, 185; Cunliffe 1997, 127–8; Green 1997, 76–7; Armit 2011; 2012). For instance, re-examination of skeletal material from Sculptor’s Cave, Covesea on the Scottish coast has revealed evidence for decapitation and the display of human heads inside the cave during the Roman Iron Age (Armit *et al.* 2011). It is not impossible that the Boat Cave skull, another coastal site looking towards Scotland, reflects comparable traditions.

Similarly intriguing is a human tooth from Coffey Cave that was found at the cave entrance during excavations in 1901 (Scharff *et al.* 1903a; Dowd 2013b). Coffey Cave is one of a series of small passages that penetrate the western slopes of Keshcorran Hill (Figure 7.2). Only one other human skeletal element – a humerus fragment of unknown date – was found in this particular cave though excavations were quite

extensive. Other material found in proximity to the human tooth include animal bones, a whetstone, an antler point, bone needles and bone points – none of which are diagnostic. A hillfort surrounds the upper reaches of Keshcorran Hill (Condit *et al.* 1991), above the level of the caves, and may have been occupied when the tooth was deposited in Coffey Cave. It is likely that the Kesh Caves were quite significant to the late prehistoric community living on the summit. The caves are visible from a great distance and may have served as a convenient landmark for the settlement. The western route up to the hillfort would have involved passing by the caves. Did the hillfort inhabitants frequent the caves? Might the human tooth have been deposited during one such visit? How did they perceive these dark openings in the hillside?

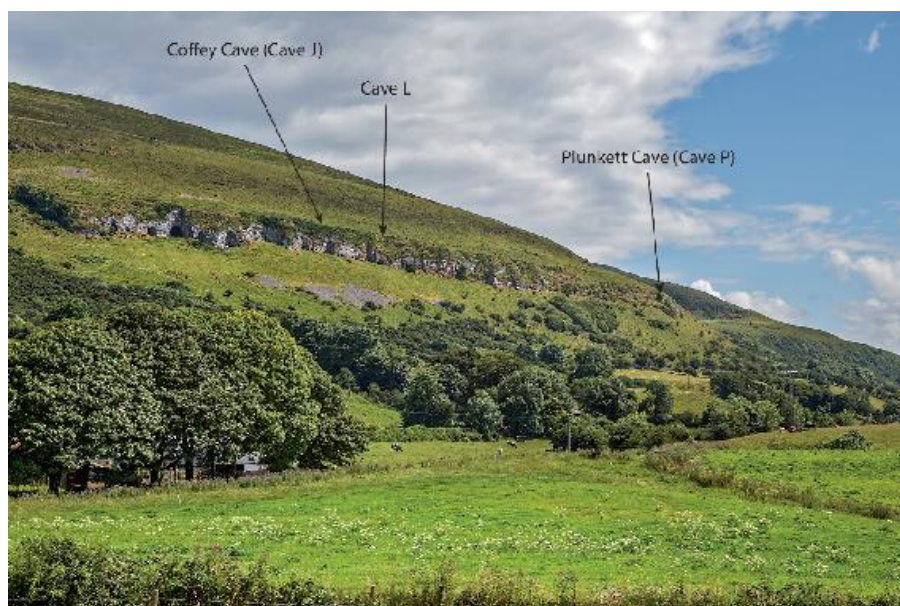


Figure 7.2 The Kesh Caves, Co. Sligo with Coffey Cave, Cave L and Plunkett Cave indicated (Photo Thorsten Kahlert)

By itself the Coffey Cave tooth might appear to be of little consequence. However, the disproportionate number of human and animal teeth in some of the adjacent caves on Keshcorran Hill suggests human activities. At Plunkett Cave (c. 100m south of Coffey Cave) five human skeletal elements, including four teeth, were recovered. One of these teeth returned an Early Medieval date of 1450 ± 50 BP (Table 7.1). The teeth from both caves derived from adults and displayed no signs of decay (Fibiger forthcoming). This infers that they were not natural losses: the teeth must have been extracted from the living or

removed from cadavers. A similar patterning is represented in the faunal assemblages. A horse tooth from Plunkett Cave returned a late Iron Age date (Table 7.1). It almost certainly reflects human activities due to the difficulty of accessing this cave and because it is too small to have sheltered a large animal – though carnivore activities cannot be ruled out. At Cave L, about 25m south of Coffey Cave, seven of the eight skeletal elements of dog recovered during excavations in 1930 consisted of teeth (O'Doherty 1930). These teeth have not been radiocarbon dated or subjected to modern analysis but they may potentially represent activities similar to those that took place in Plunkett Cave and Coffey Cave.

The material from Kesh is tentatively interpreted here as reflecting traditions of the ritual deposition of human and animal teeth in the caves over several centuries. A parallel for the special treatment of human teeth is found at one of the Neolithic passage tombs at Carrowmore (Grave 27), just over 20km north-northwest of the caves. Here, 168 teeth – seemingly of Iron Age date and representing at least 12 adults and 11 sub-adults – occurred within the stone packing around the monument (Burenhult 1980, 64–7; Ydén 1980, 133). The placement of teeth in the Kesh Caves may have been linked to the quarterly agricultural festival of Lughnasa, which in recent centuries was held at the foot of Keshcorran Hill (see Chapter 10). When this festival began is not known (the earliest written reference dates to the 9th century), but it may represent a continuation of earlier pre-Christian traditions due to its intrinsic association with Lugh, the Irish equivalent of the Roman deity Mercury. A god of many skills, Lugh was credited with the invention of horsemanship (MacNeill 1982, 3, 6). Though a very speculative link, this association may have some bearing on the horse tooth from Plunkett Cave.

SPECIAL ANIMAL DEPOSITS IN CAVES

The horse tooth from Plunkett Cave is not an isolated occurrence. A small but significant number of horse, red deer and wolf bones from five caves have returned Iron Age dates (Table 7.1) as part of two different radiocarbon dating projects (Woodman *et al.* 1997; Carden *et al.* 2012). The number of Iron Age dates is disproportionately larger than those from any other prehistoric period, particularly considering that the Iron Age is the shortest of all periods. A random selection strategy was employed in both dating projects though particular species of animals *were* deliberately targeted. For instance, over 20,000 animal bones were recovered from Barntick Cave, Bats' Cave and Elderbush Cave during excavations in 1903 and 1904 (Scharff *et al.* 1906, 3). In the 1990s three of these bones were selected for dating from the latter two sites with the aim of identifying mammalia of

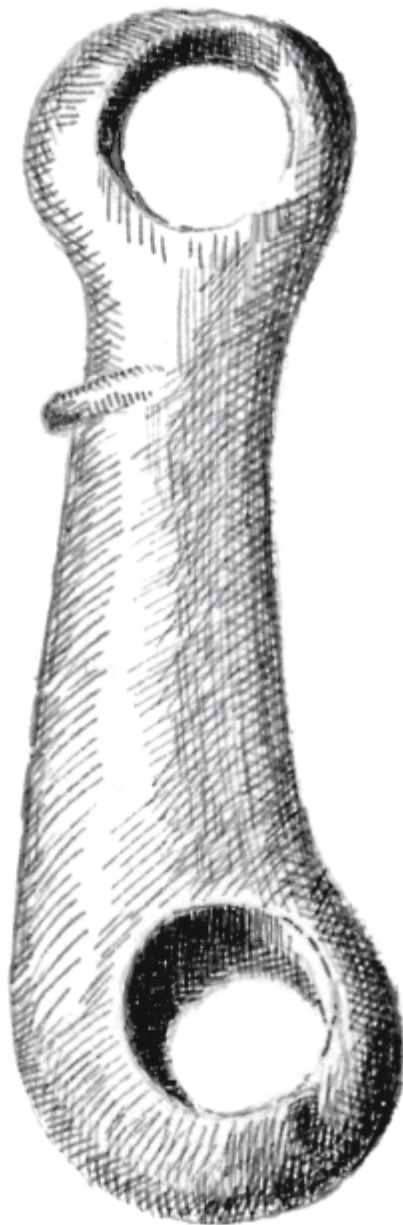
Pleistocene and early Holocene date (Woodman *et al.* 1997, 129). All three bones returned Iron Age dates, a statistically unlikely result. There is a tentative suggestion therefore – which can only be tested by a battery of further radiocarbon dates on randomly selected animal bones – that there may be a greater incidence of animal bones of Iron Age date in caves and that this increased occurrence may reflect human activities. There may be some significance to the fact that many of the dates are from wild species rather than domesticates. Were caves associated with wilderness and wild animals in parts of Iron Age Ireland? Of course natural formation processes cannot be ruled out. For instance, the horse bone from Bats' Cave is broadly contemporaneous with the wolf bone from the nearby Elderbush Cave; it could be argued that one represents a meal enjoyed by the other. Based on current evidence, however, anthropogenic factors appear to be just as plausible particularly as the animals in question were of symbolic significance across Iron Age Europe (see below).

HORSE BITS AND BONES

Though the Iron Age material from caves is sparse, horse appears as a recurring theme as represented by the equine remains from Plunkett Cave and Bats' Cave, the association between the Kesh Caves and the god of horsemanship, and a horse bit fragment from Brothers' Cave, Co. Waterford. The importance of horse across Iron Age Europe is testified by the inclusion of complete or partial horses in funerary contexts; the interment of horses independent of human burial; the ritual deposition of equine bones (particularly skulls) and horse equipment (such as bridle bits); the occurrence of horse remains in royal and high status sites; the significance of the chariot in funerary contexts; and the depiction of horses in rock art and coinage (Wait 1985, 150; Green 1986, 171–5; 1997, 85–7; Hill 1995; Cunliffe 1997, 99–105; Bhreathnach 2002). In Irish Medieval mythology the goddess Macha, who lent her name to the royal site of Emain Macha in Co. Armagh, is associated with horses as is her Gaulish equivalent Epona (Toner 1988; Ó hÓgáin 1991, 284–5). The most notable characteristics of the horse include speed, beauty, grace, strength and fecundity; this animal has been closely linked to kingship, nobility, warfare and transport (Mac Coitir 2010, 21–32).

The bronze side-link of a La Tène horse-bit (Type B) found in Brothers' Cave in 1906 cannot be located at present but an illustration survives from the time of discovery (Figure 7.3) (Forsayeth unpublished). It is the only diagnostic artefact of Iron Age date from the site and may represent an intact horse-bit that broke post-deposition. The side-link is comparable to Arrastype examples from eastern and southern England and Type B bits from early La Tène

graves in the Marne area of France (Raftery 1984, 31). These items were 'intrinsically important in their own right and were probably prized and valuable possessions among the well-to-do classes ... they might have served as status symbols' (Raftery 1994, 108). In Ireland La Tène metalwork (where the findspot is known) has been recovered almost exclusively from wet places and represents votive material. The side-link from Brothers' Cave was probably also a special item and is likely to have been ceremonially deposited: approximately 60% of Iron Age votive hoards contain horse equipment (Cooney and Grogan 1994, 196). Furthermore, Brothers' Cave could be classified as a wet place. Following prolonged rainfall large pools of water collect in the outer part of the cave close to the entrance. Standing water can be present here for weeks or months on end. The disappearance of these pools during dry weather (similar to bogs) may have been construed as ritually significant: this was a place of transformation.



*Figure 7.3 La Tène horse-bit side-link from Brothers' Cave, Co. Waterford
(Illustration R. W. Forsayeth, reproduced by permission of the RSAI)*

The Brothers' Cave side-link occurs outside the usual distribution of La Tène material which is concentrated in the northern half of the country (Raftery 1994, 227). However, an antler La Tène sword pommel was recovered from the Colligan River (Raftery 1983, 93) which, at its closest point, flows about 7km east-north-east of Brothers' Cave. The pommel almost certainly represents another

votive offering in the region. The phenomenon of ritual deposition at this time is 'prominent because of the artistic qualities and quantity of the metalwork deposited in contrast to the small number of archaeological sites which have been dated to this period' (Aitchison 1996, 67). This is particularly true in the case of the artefacts from Brothers' Cave and the Colligan River. Though modest in nature, they indicate Iron Age activities in a part of the country where such evidence is extremely rare and they testify to the occasional occurrence of La Tène material beyond the typical northern distribution.

During the Iron Age, activities and sites were often located adjacent to, within, or surrounding existing monuments and special places in the landscape, locations that were invested with cultural and social significance (Cooney and Grogan 1994, 187). In particular the 'deliberate deposition of metalwork after 300 BC takes place very often in the same places and contexts as were used in the Late Bronze Age. The objects have changed but the behaviour is similar' (*ibid.*, 180). During the Late Bronze Age journeys were made into the deepest part of Brothers' Cave to deposit votive material (Chapter 6). The religious import of this underground system may have lingered for several subsequent centuries because it was seemingly used in a similar manner by Iron Age communities. At this time, however, there is little to suggest that people clambered down into the cave or explored the deeper passages. The side-link was recovered from a large mass of earth and stones (the 'Great Slide') that choked the vertical descent between the surface opening and the cave floor several metres beneath (Forsayeth unpublished). This suggests that the horsebit fragment may have been thrown into the cave by someone standing at the circular opening overhead. This tradition of casting material into deep vertical openings in the earth and witnessing its disappearance into darkness is a recurring theme in religious practice across Iron Age Europe. In Britain, at least 21 artificial vertical shafts and wells are recorded that were used in the Iron Age for the placement of ritual offerings including pottery, human bones, ashes and animal remains – usually cattle, horse and dog (Wait 1985, 65, 80). Natural vertical swallowholes in Britain fulfilled a similar function (Lewis 2000), as did artificial vertical shafts and wells in France and Germany that sometimes occur within earthen enclosures known as *viereckschanzen* (Buchsenschutz *et al.* 1989; Cunliffe 1997, 200–1).

RESONANCES OF RED DEER

Archaeological assemblages from caves indicate that red deer, like horse, may have been of symbolic significance in later prehistory and this is supported by a wider body of evidence from across Europe. The

importance of deer, and specifically stags, is illustrated by their depiction on prestige items such as the Altstetten gold bowl from Germany and the Gundestrup cauldron from Denmark; the manufacture and use of stag figurines and antler headdresses; the occurrence of special deposits of deer bones or antlers as votive offerings or accompanying burials; and the representation of deer in art (Green 1986, 182–4; 2002, 41). The Celtic gods linked to this animal were Cernunnos and Cocidius. In Ireland the Medieval goddess of deer was Flidais (Mac Coitir 2010, 39). Symbolically, deer appears to have been connected to hunting, the wilderness and regeneration. Like the horse, attributes of the deer include swiftness, strength, nobility and fertility; it may also have been seen as a liminal animal due to yearly cycles of antler re-growth (Morris 2005, 11–3). Deer remains as seeming ritual inclusions have been found in association with Irish Iron Age bog bodies. A bog burial of an adult female and infant at Derrymaquirk, Co. Roscommon was accompanied by the tip of an antler tine, while red deer bones were found with a human skeleton in a bog at Kinnakinelly, Co. Galway (Ó Floinn 1995, 140–1; Brindley and Lanting 1995, 135).

The nature of the activities represented by the red deer bones and antler from Bats' Cave, the Catacombs, Plunkett Cave and Kilgreany Cave is not clear (Table 7.1). Some of the bones may reflect natural occurrences – deer that died near a cave or remains of consumed prey. Other skeletal material might reflect butchery waste or human food debris, though none of these particular deer bones bore evidence of slaughter and the naturally shed antler from Plunkett Cave does not sit comfortably with this hypothesis. Also possible is that joints of meat or parts of animals were deliberately placed in caves as part of ritual practices, potentially mirroring some of the Iron Age horse bones and artefacts. Aside from radiocarbon dates, red deer is also represented by the antler parallelepiped dice of probable Iron Age date that were found close to the entrances of Barntick Cave, Co. Clare and Kilgreany Cave, Co. Waterford. Is it simply coincidence that Barntick Cave is located just 400m from Bats' Cave where a deer maxilla was found? Was there any perceived or real association between the antler dice and the deer phalanx from Kilgreany Cave? These are all very tenuous connections but worth considering nonetheless.

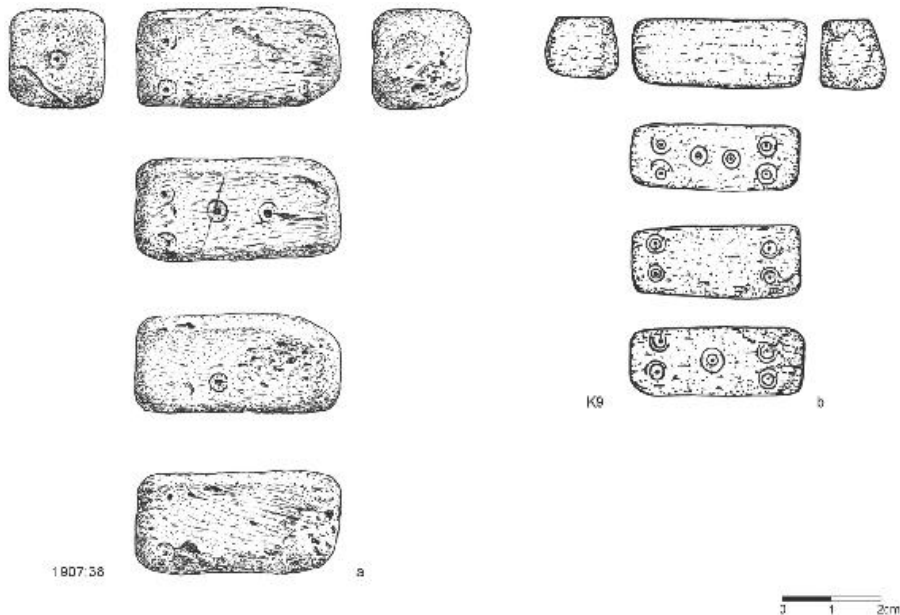


Figure 7.4 Antler parallelepiped dice from Barntick Cave, Co. Clare and Kilgreany Cave, Co. Waterford (Illustration a. Malgorzata Kryczka; b. Dowd 2002)

The dice from Barntick Cave and Kilgreany Cave consist of elongated rectangular blocks of antler that are square in section (Figure 7.4). Numbers are represented by dot and circle motifs on the long sides. Unusually, the number 1 is represented on one of the square ends of the Barntick dice; typically these ends are left blank. From a typological perspective the dice conform to Class 3B, of which there are 16 other examples in Ireland; about half have been found on Iron Age sites and half in Early Medieval contexts (Breen 1994, 111–2).

The best known parallel for the two cave dice are the three examples that accompanied two decapitated adult males found lying head to toe in a semi-crouched position beside Knowth passage tomb, Co. Meath. The burials were dated to the Iron Age and other gravegoods included bone gaming pieces and water worn pebbles (Eogan 1974, 73–80). A parallelepiped dice was also discovered at Newgrange passage tomb in association with votive Roman material (Carson and O’Kelly 1977, 51, Plate VIIA), and one was recovered from an Iron Age cremation pit located within a ring-ditch at Ballyboy, Co. Galway (Delaney *et al.* 2012, 95–7). In Britain parallelepiped dice are typically found on Iron Age and Roman sites (MacGregor 1985, 129). While it is not possible to definitively date the dice from Barntick and Kilgreany, Iron Age examples tend to be

long relative to their width which is the case with these two (Eogan 1974, 80). Because late prehistoric parallelepiped dice are usually found in ritual and funerary contexts, the cave examples may represent votive offerings. This is particularly compelling considering that these sites may have been considered sacred due to their association with ritual activities of the ancestors. Human bones of Neolithic date were found in Barntick Cave, while Kilgreany Cave contained burials and human bones of Neolithic and Bronze Age date as well as a Late Bronze Age metalwork hoard. This return to older ritualised places in the landscape is also referenced by the occurrence of dice at passage tombs in the Boyne Valley.

THE CAVE OF CRÚACHAIN: THE FOCUS OF AN IRON AGE RITUAL LANDSCAPE?

The Cave of Crúachain (known as Oweynagat since the 19th century) is located within the ritual landscape of Rathcroghan, Co. Roscommon – one of the principal royal sites of Iron Age Ireland. It boasts a concentration of over 60 prehistoric and early historic monuments contained within an area of 6.5km². Sites range from prehistoric mounds, enclosures and ring-barrows to Early Medieval ringforts. A high proportion of the monuments are ceremonial or funerary in nature (Herity 1983; 1984; Waddell *et al.* 2009). Rathcroghan was described as a pagan centre in the *Féilire Óengusso* of circa AD 830, while the 12th century *Lebor na hUidre* identified it as one of the three principal pre-Christian places of burial in Ireland (Waddell 1983, 21–3).

The Cave of Crúachain is situated towards the centre of the Rathcroghan complex. It was possibly one of the most sacred elements in this Iron Age landscape and may even have served as a catalyst for the construction of funerary and ritual monuments in the immediate environs. The early literary sources ‘emphasise the sacred importance of Rathcroghan as a place apart from the profane world’ (Waddell 1988, 14) but it is the Cave of Crúachain that figures most prominently in Early Medieval and Medieval texts (see Chapter 9). No other site at Rathcroghan has attracted anything comparable to the number of narratives or references. The cave is represented as the abode of several omnipotent women including Mórrígan, Cruachú, Scothníam and a woman of the *sídh*. The supernatural male, Olc Aí, also dwelled there as did a host of otherworldly animals including malevolent pigs, a triple-headed bird, red birds of death, three ‘druidic’ cats and three wolves. The cave was described as the entry point to hell and the Otherworld, as well as being one of the three darkest places in Ireland. According to the early texts, the Cave of Crúachain was the most potent feature in the Early Medieval landscape at Rathcroghan, seemingly a terrifying ominous place. But

when did the cave assume such a role? Do the Early Medieval narratives simply reveal contemporaneous beliefs about the cave or could they reflect much older traditions? As a natural topographical feature the cave pre-dates all the monuments at Rathcroghan. Arguably it may have achieved status as a sacred place in earlier prehistory, thereafter becoming the point of origin from which this highly ritualised late prehistoric landscape evolved.

The Cave of Crúachain consists of a natural limestone fissure at least 37m in length and on average 2.85m wide. An artificial section of underground passage, 10m in length, extends from the cave mouth and includes rock cutting of the natural cave passage, sections of drystone walling, and the construction of an Early Medieval souterrain (Condit and Moore 2003; Waddell *et al.* 2009, 79–83). An 1864 woodcut of the cave by Samuel Ferguson indicates the presence of a small circular embanked enclosure surrounding the entrance (Figure 7.5). This consisted of a bank 2m in width that surrounded an area 17m in diameter that was slightly raised in the centre. No indication of the enclosure now survives and it was not traced by geophysical investigation. However, intense activities involving fire were identified in the interior of the monument (Fenwick and Parkes 1997, 13; Waddell *et al.* 2009, 83–9).

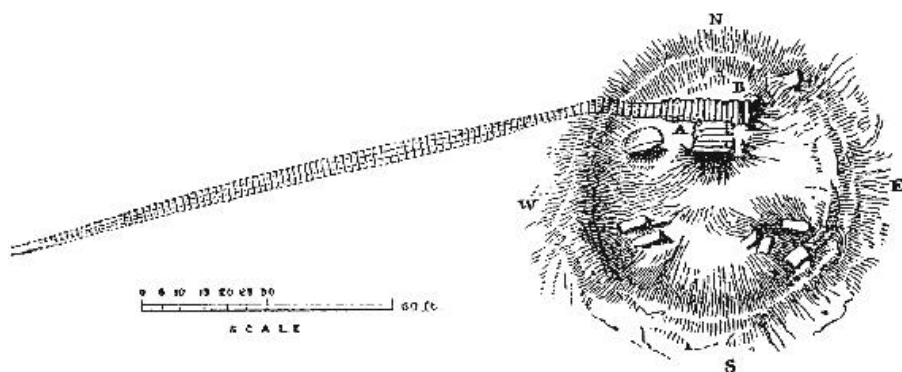


Figure 7.5 The Cave of Crúachain, Co. Roscommon and surrounding enclosure in the mid-19th century (Ferguson 1864/6)

The enclosure surrounding the cave entrance has been interpreted on more than one occasion as an Early Medieval ringfort or settlement (Waddell 1983, 33; Waddell *et al.* 2009, 86). This is wholly unconvincing, not least because the enclosure is half the size of the average ringfort, but also because there is no indication of an external ditch in the 19th century depiction and one was not picked up by geophysics. The banks are also quite slight according to the antiquarian depiction. Furthermore, early historic habitation sites at

Rathcroghan deliberately avoided the nucleus of Iron Age funerary and ritual sites in which the cave is centrally located (Herity 1983, 138; 1987, 135–6). This part of the landscape seems to have been associated with burial and the ancestors and thus it was inappropriate to locate domestic settlements here in Early Medieval times. The documentary sources are also relevant: they repeatedly depict the cave as a fearful supernatural place. It is difficult to envisage that a secular settlement would have been constructed around such a highly charged location.

There is some consensus that the enclosure surrounding the Cave of Crúachain is ritual in nature (Herity 1987, 138; Waddell *et al.* 2009, 103) but there is less certainty regarding the date of its construction and use. Waddell *et al.* (*ibid.*, 103, 221) contend that the enclosure is contemporaneous with the construction of the artificial portion of the Early Medieval souterrain and intriguingly refer to the possibility that the mythology echoes oracular and prophetic practices, or warrior initiation rituals and rites of passage such as social and religious seclusion, that may once have taken place inside the cave. I think it is more probable that the enclosure is late prehistoric in date, predating the souterrain by many centuries. The monument depicted by Ferguson (Figure 7.5) resembles a barrow or embanked enclosure in terms of dimension and the seeming absence of a ditch (barrows occur with some frequency at Rathcroghan). Ferguson (1864/6, 162) also referred to the occurrence of ‘several interments’ within the enclosure. His woodcut depicts what appear to be five or six rectangles in the southern half of the enclosure, features that might tentatively represent cist graves. Waddell *et al.* (2009, 79, 81) argue that Ferguson was ‘quite erroneous’ on this point, seemingly because the ‘interments’ compare well with surface stones noted in a recent topographical survey.

If the enclosure is prehistoric in date, then the original natural entrance to the Cave of Crúachain would have been located immediately inside the north-western bank. It is plausible that this enclosure served to *contain* the cave, to control or emphasise what was perceived to be an extremely potent and dangerous place in the landscape, and to restrain the supernatural – themes echoed in the early literary narratives. The monument may reflect efforts to demarcate the boundary between this world and the Otherworld. No excavations have ever taken place inside the natural portion of the cave which might address whether it was actively used during the Iron Age. Similarly, the date and function of the enclosure surrounding the entrance can only be established by excavation. Whether any archaeologist would dare disturb this entrance to the Otherworld is another matter entirely.

DEPARTING PREHISTORY

The Iron Age material from caves could at best be described as eclectic: a human tooth, a human skull, four deer bones, two horse bones, a wolf bone, two dice and a horse-bit fragment. That this collection – representing 1000 years and encompassing the entire island – would fit comfortably into a small box is quite sobering. While Mesolithic material from caves is also very sparse, there is concrete evidence that at least one site – Killuragh Cave – was the focus of repeat activities. This cannot be stated with any degree of confidence for the Iron Age. The Medieval period is also poorly represented in cave assemblages but the paucity of material culture is supplemented by a rich mythological record as preserved in manuscript form. Based on present evidence therefore, the Iron Age is the most impoverished and under-represented of all periods in the archaeological record from caves. The arrival of a new religious belief system in the early 5th century AD, however, heralded a dramatic change to the social, economic and political fabric of the country. One aspect of this change was that people now began to engage with caves in an entirely different fashion.

Chapter 8

Out of the Darkness, Into the Light the Early Medieval Period (400–AD 1169)

By the 5th century ^{AD} the new religion of Christianity had reached Ireland. The social, cultural and political transformations that ensued were, to an extent, symbolised by the remarkable change in how caves came to be used and perceived. The link between caves and religious activities continued: some sites were regarded as important because of their association with saints, and there is likely to have been an overlap between pre-Christian concepts of a supernatural subterranean landscape and the Christian hell and purgatory. The extent to which caves were used to fulfil a range of everyday domestic activities, however, was a new departure and suggests that the adoption of Christianity may have led to somewhat of a general ‘demystification’ of caves. Caves appear to have lost some of their potency and now became spaces that could be inhabited, used for storage, to conceal valuables, as hideaways and places of refuge. The majority of caves with material of Early Medieval date were sites that had been visited in prehistory, but there is usually no continuity as to the type of activities enacted (Figure 8.1). Currently, over 37% of known caves of archaeological significance contain Early Medieval material.

THE LIGHT OF CHRIST ILLUMINATING THE DARKNESS OF HUMANKIND

In the early centuries ^{AD}, caves in the Holy Land came to be seen as ‘dark, unsavoury places redeemed by their contact with Christ, or another saintly figure, just as fallen humanity would be redeemed. They became ‘caves of light’ rather than darkness, holy places rather than grottos inhabited by demons’ (Taylor 1993, 179). This allowed sites that had been sacred in pre-Christian times to continue as significant places, but now because of associations with Christian figures. In some traditions many of the most important events in the life of Jesus Christ occurred in caves. According to Byzantine Christians in Palestine, Mary, the mother of Jesus, had lived in a cave in Nazareth; Jesus was born in a cave; Jesus, Mary and Joseph lived in

a cave in Bethlehem for two years; Jesus delivered the Beatitudes in a cave; he celebrated the last supper in a cave; and he was arrested in a cave (*ibid.*). The recurrence of caves in narratives about the life of Jesus in part reflects the abundance of caves and artificial rock-cut tombs in that part of the world, but emphasises the deliberate symbolic message of bringing light (salvation) to dark (pagan) places.

Many of the early proponents of Christianity (as well as mystics and ascetics from other religious traditions) used caves as places of solitary retreat wherein an eremitic came into closer communion with God (Ustinova 2009). For instance, the patron saint of cavers, St. Benedict of Nursia, spent three years as a hermit in a cave at Subiaco near Rome. In the 3rd century AD, St. Anthony reputedly spent up to four decades in a mountain cave in the Egyptian desert (Ryan 1931, 17; Hughes 1948, 39). A cave on Mount Clysma now dedicated to Anthony consists of a small narrow passage that leads into a cramped chamber in which an altar is located (Finneran 2002, 75). Other 4th century reclusive ascetics include St. Paul who retired to a cave near the Red Sea, and Macarius the Egyptian who was forced to retreat to a cave on occasions when his desert cell in Nitria was besieged by visitors (Hughes 1948, 16; Ryan 1931, 24). In the hot climates of North Africa, caves provided convenient ready-made shelters that were cooler in summer and warmer in winter. Holy men may have consciously sought out caves because of traditions that Jesus too had fasted and sought spiritual enlightenment in caves. His cousin John the Baptist also spent several years in solitude in a cave (Taylor 1993, 157). In time, many of the caves associated with biblical figures or early Christians came to be sites of pilgrimage and devotion. Taylor (*ibid.*, 163) has postulated that the 'sanctification of caves had symbolic resonances. Caves were saved from pagan exploitation. Christians 'discovered' that they were in fact once used by saints, or in a significant biblical event, and that they therefore deserved redemption. As more and more pagans embraced Christianity, more and more caves were 'saved' and turned into Christian holy places'. We may be looking at somewhat similar traditions in Ireland.

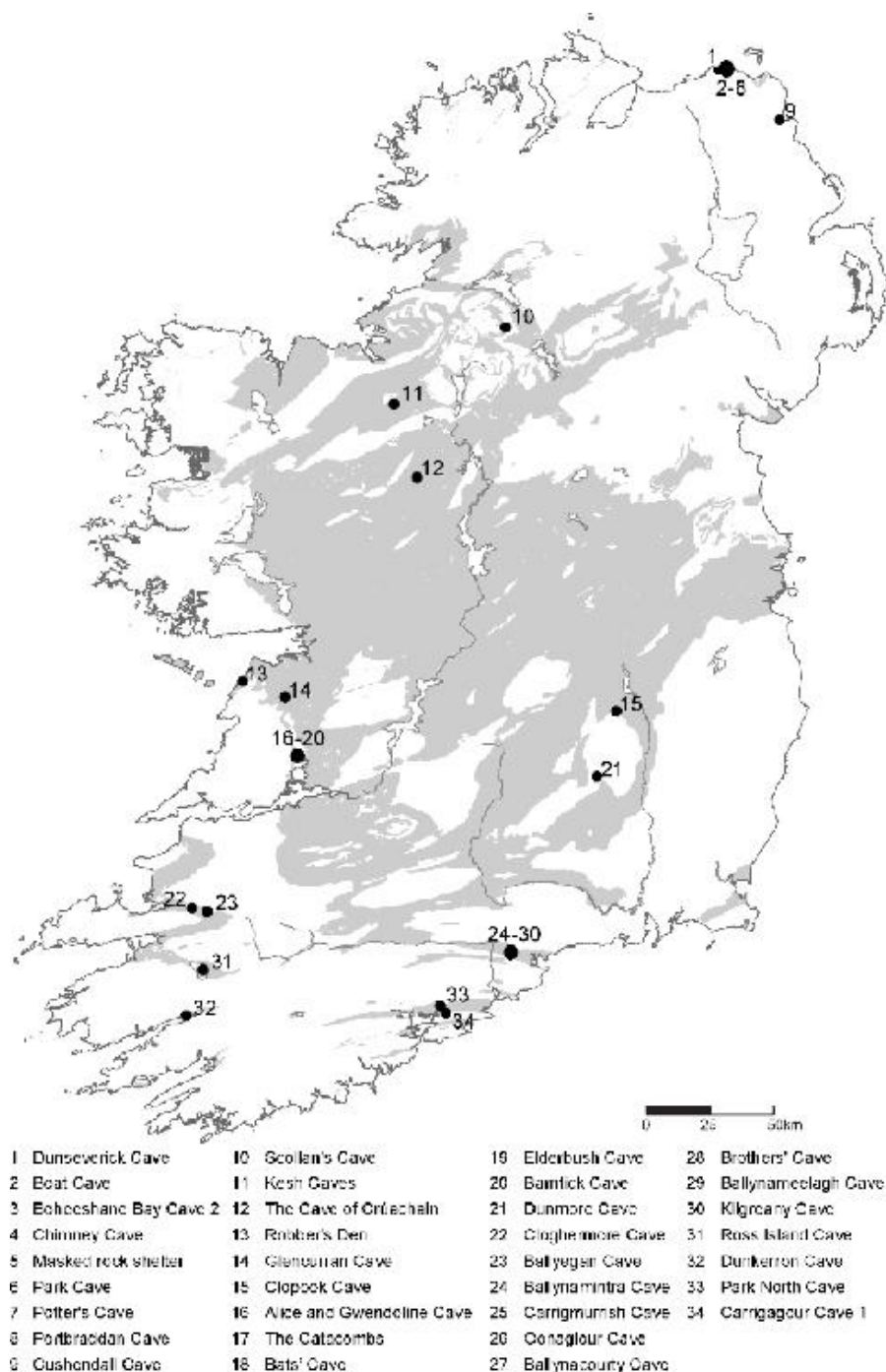


Figure 8.1 Caves with archaeological material of Early Medieval or probable Early Medieval date

Several Irish caves are linked to saints in 19th and 20th century folk

traditions (see Chapter 9) and there is some evidence of such associations in the Early Medieval period. In the 9th or 10th century *Tripartite Life of St. Patrick*, for instance, St. Patrick is advised by Sechnall to give his chariot to St. Fiacc of Sletty who had spent Lent or Shrove Saturday in the cave of *Uaimh Cnucc Dromma Coblai*, identified as Clopook Cave, Co. Laois (Manning 2005, 110). The 12th century *Life of St. Colman mac Lúachán* mentioned that the saint spent three Lents in a cave that faced the Boyne River (McConkey 2012, 196). Future excavation of caves that are located within monastic settlements might reveal habitation debris that could suggest occupation by an Early Medieval anchorite or hermit. For example, St. Colman's Cave within the monastic complex at Keelhill, Co. Clare is said in folk tradition to have been the saint's hermitage; archaeological excavation may throw light on this tradition.

Links between a saint and a particular cave may have led to the construction of a monastery at a particular location or, if a cave happened to exist within a monastic complex, it may thereafter have been utilised by an anchorite. It is worth considering that some of the caves that contain Early Medieval habitation debris (see below) of a seemingly secular nature may in fact have been occupied by holy men. This should not be surprising considering the wealth of evidence that Scottish caves were used as hermitages by ascetic monks. Indeed, the Scottish tradition may have been introduced by Irish missionaries. The seeming absence of Christian carvings in Irish caves, in contrast to the Scottish examples, may be little more than a lack of concerted fieldwork and close inspection. A cave on the island of Arran, Scotland, was reputedly the hermitage of the Irish St. Molaise and many crosses are carved into the cave walls; incised crosses are also visible on the walls of the adjacent Smuggler's Cave (Fisher 2001, 61–5). At St. Columba's Cave, Kintyre, two incised crosses were carved into the cave wall above a rubble-built altar and substantial occupation debris occurred at this site (*ibid.*, 151). Columba was another Irish saint and is similarly associated with a cave retreat near his monastic foundation at Annegray in France (McConkey 2012, 195). Some of the Scottish cave hermitages have also produced ecclesiastical metalwork. A fragment of bronze with interlace decoration was discovered during excavation of King's Cave on Arran, a site where crosses and ogham inscriptions were carved into the cave walls (Fisher 2001, 65). This find is significant considering that shrine fragments have been recovered from Kilgreany Cave, Co. Waterford and Park North Cave, Co. Cork (see below).

HOME IS WHERE THE HEARTH IS

Whether early Christian hermits ever lived in caves in Ireland is

uncertain, but without doubt caves proved attractive dwelling places for other members of society. Dry or relict caves need little by way of modification or addition to act as relatively comfortable living spaces. Most of the caves that were occupied in the Early Medieval period were small dry chambers that would have been large enough to comfortably accommodate one or a few people, yet small enough to retain heat. Habitation debris generally occurs around the entrance areas; there is little indication of Early Medieval activities deep underground. The finds from these cave sites are typical of material recovered from enclosed settlements such as ringforts and crannógs and includes hammerstones, whetstones, rotary quern stones, Souterrain Ware pottery (Antrim caves only), ringed pins, iron knives, iron nails, slag, spindle whorls, lignite bracelets, bone needles, bone points, bone pins, bone combs, bone knife handles, gaming pieces, worked bone, worked antler, butchered animal bones, hearths and charcoal.

Structural features such as internal dividing walls, breached walls across cave entrances, and trodden or cobbled floors occur at some caves. In most cases the date of such features is not known because the relevant excavations took place prior to 1950, but the apparent association with Early Medieval strata suggests contemporaneity. Trodden or compact floors have been recorded in Kilgreany Cave, Co. Waterford and Bats' Cave, Co. Clare, while cobbled and paved floors were noted at Scollan's Cave, Co. Fermanagh and three Antrim sites – Chimney Cave, Boat Cave and Portbraddan Cave. All of these sites have produced Early Medieval artefacts. In some cases, however, all that survive are paper records. Excavations at Scollan's Cave in 1941 revealed a stone wall (1.5m high × 0.9m wide) built across the entrance with a paved breach to permit access inside. Two stone-lined hearths described as 'oval, hollowed into the subsoil' were found and part of the cave floor had been paved with stones. A large quantity of burnt and unburnt animal bones (cow, sheep and pig) was retrieved in addition to burnt hazelnut shells and burnt cereal grains. Artefacts recovered included a bone needle, a bone comb and an iron fragment (Gamble 1946). Scollan's Cave was quite probably occupied in Early Medieval times based on the artefacts retrieved and parallels with other sites, but none of the excavated material survives and the cave itself cannot be located at present.

Small fires would have transformed caves into cosy living spaces; hearths and quantities of charcoal frequently occur at cave entrances. Precise dating is an issue, however, because charcoal from early excavations was rarely if ever retained. For instance, a large hearth (0.9m × 0.9m × 0.15m thick) was found at the entrance to Cave N – one of the Kesh Caves, Co. Sligo – and, together with seashells, animal

bones and fish bones, was interpreted as evidence of temporary occupation (O'Doherty 1930). None of the charcoal from Cave N survives, however, and thus the period of activity is a matter of speculation. Habitation debris from two of the adjacent sites at Kesh – Plunkett Cave and Coffey Cave – was clearly of Early Medieval date (Scharff *et al.* 1902; 1903a; 1903b; Dowd 2013b). The uppermost 'dark brown earth' in Coffey Cave was 0.3m thick and contained a hearth and animal bones just inside the entrance in addition to an antler point, worked bone, a late 9th–10th century bone comb fragment, two bone needles, two fragments of bone needles or pins, a whetstone and an armour piercing projectile head of 10th–13th century date (Figure 8.2). At Plunkett Cave activities were also concentrated at the entrance where charcoal, a bronze ringed pin, an iron bow saw, seashells and animal bones were found. An iron bar and a second ringed pin occurred 12m inside the entrance (Figure 8.2).

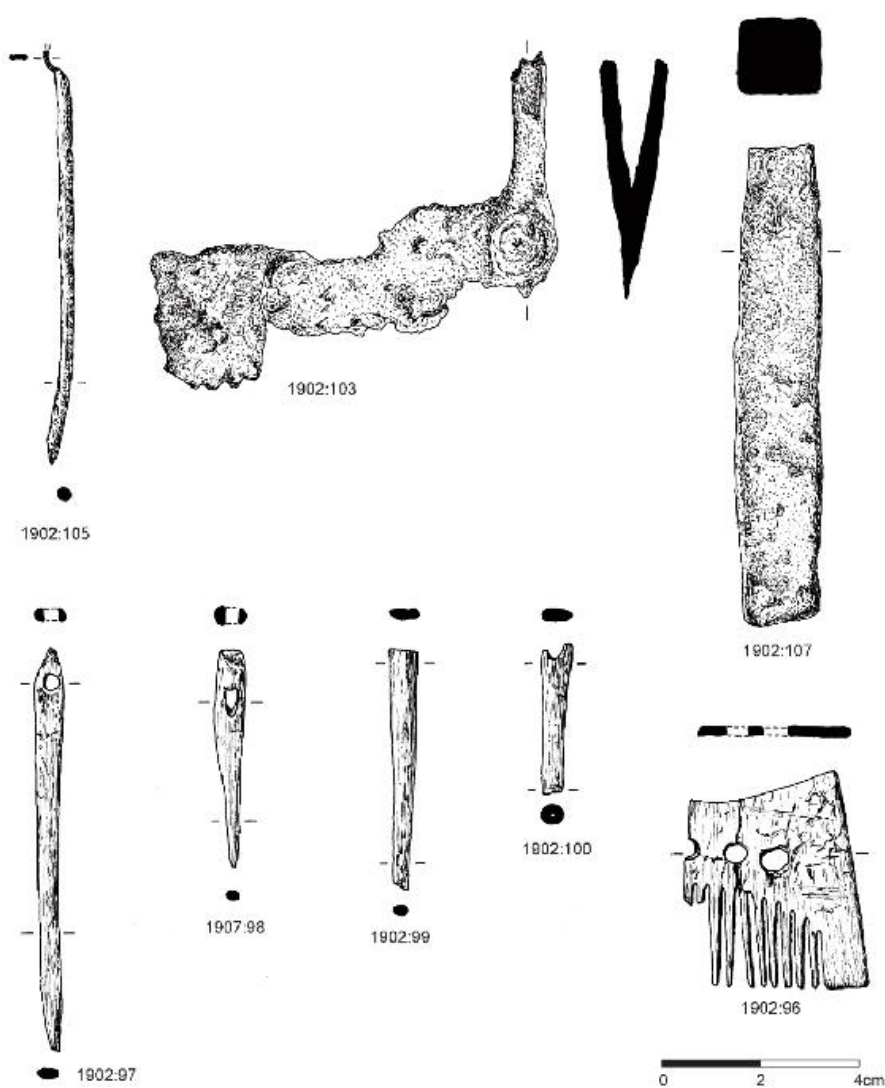


Figure 8.2 Early Medieval artefacts from the Kesh Caves, Co. Sligo (Dowd 2013b). Plunkett Cave: Bronze ringed pin shaft, iron bow saw, iron bar. Coffey Cave: bone comb fragment, two bone needles, fragment of bone needle or pin, bone needle fragment

It is interesting that at least two of the 17 caves at Kesh were occupied during the Early Medieval period, a time when the early literary sources reveal that these caves were perceived as places of the Otherworld and abodes of supernatural beings (see Chapter 9). Could this suggest that the inhabitants were not aware of the mythology, perhaps travellers from other regions? That the bone comb from Coffey Cave is a Viking type and possibly a direct import from Scandinavia (Dunlevy 1988, 395) lends some credibility to this theory,

as does the evidence that Vikings may have occupied caves in the south of the country (see below).

DURATION OF OCCUPATION

The length of time that an individual or small group inhabited a cave would have varied. In their assessment of Romano-British cave use, Branigan and Dearne (1992, 16) defined three forms of occupation: long-term – more or less permanent occupation for at least five years; short-term – more or less permanent occupation for one to five years; and episodic use – limited to certain times of the year, perhaps seasonal and repeated. In theory, this model could also be applied to Irish caves but it is near impossible to differentiate between intense occupation that may have spanned several years, versus episodic but repeat usage of a cave over many decades – particularly considering the highly disturbed stratification and lack of contextual integrity that characterises most sites. Large quantities of artefacts and refuse do not necessarily equate with long periods of habitation (though they do suggest intense usage), while a paucity of material does not necessarily indicate short-term occupation – domestic equipment may simply have been moved with the inhabitants to another location. Overnight shelter is unlikely to leave any archaeological trace though this was probably the most common way in which caves were occupied, and not just in Early Medieval times.

The duration of occupation is partially determined by site morphology. Some dry caves can become wet and uncomfortable during rainy weather as water percolates through fissures and openings in the roof. These sites were only habitable in dry summer months. Other caves were so small that they would have deterred long-term stays or restricted occupation to one person (though these same features may have been attractive to Christian hermits). Elderbush Cave, Co. Clare, for example, is just 0.9m wide, a fact that led Scharff *et al.* (1906, 67) to remark that it could not have been used for anything other than ‘shelter, or at most a brief residence, to an occasional individual’. Domestic debris suggestive of Early Medieval activity at Elderbush includes a spindle whorl, a bone pin, worked and sawn animal bones, an iron knife, an iron nail and slag (*ibid.*).

dry cavern (31m long $\times$ 10.5m wide) that would have been suitable for long-term occupation, particularly as daylight penetrates the outermost 12m of cave passage (Figure 8.3). During excavations in the 1930s, a series of Early Medieval habitation strata were encountered that contained layers of ash, numerous animal bones, two bone needles, a bone comb of 8th–10th century date, worked and sawn bone and antler, bone points, eight bone stick pins, rotary quernstone fragments, a spindle whorl, whetstones, a miniature chalk vessel (possibly a crucible), a bone tube, a bone needle case, hammerstones, anvil stones, iron fragments, slag and Souterrain Ware pottery (Figure 8.3) (May 1943). Several hearths that were seemingly contemporaneous occurred immediately inside the entrance, and up to seven further hearths may also reflect Early Medieval activities. A deposit of charred grain contained in a matrix of dark soil extended over an area 4.6m $\times$ 10m and was 0.08m thick. Barley, rye and wheat were identified at the time (*ibid.*, 44) which, taken with the stratigraphic evidence, suggests this was an Early Medieval stratum as rye was not common in Ireland in prehistoric times. Grain may have been stored in the cave during which time it caught fire and burned, or charred grain may have been introduced to create a sterile level surface. The archaeological material suggests a range of everyday activities took place in Portbraddan Cave: clothing was fastened, hair was combed, food was prepared, cooked and stored, garments were mended, fires were lit, grain was ground, wool was spun, iron objects may have been manufactured, bone was whittled and worked, knives and tools were sharpened, the space was tidied, and people slept. This cave was a home.

At odds with the domestic nature of the Portbraddan Cave assemblage was the discovery within Early Medieval strata of the partial remains of three human skeletons, identified at the time of excavation as representing one adolescent female and two adult females (May 1943, 45–6). The remains can no longer be located to establish a date which is unfortunate as they pose interesting questions. Folk tradition in the area claims that bodies of victims of the 1641 Rebellion that had been recovered from the sea were placed in Portbraddan Cave before final interment in Templastragh graveyard some 175m to the south (Bertie McKay pers. comm.). If this explains the presence of the three skeletons, then 17th century activities may have truncated the Early Medieval strata thus giving the appearance of contemporaneity at the time of excavation. Conversely, the bones may be prehistoric but were somehow introduced into Early Medieval layers from deeper strata. Yet another possibility is that the skeletons are in fact contemporaneous with the strata in which they occur, and may relate to Viking activities that have been noted in the wider

vicinity of the site (Ó Floinn 1998, 145, 151; Sheehan 1998b, 174; Forsythe and McConkey 2012, 134–50). The eight highly polished stick pins found in Portbraddan Cave were identified in the 1930s as manufactured from walrus ivory (Figure 8.3) (May 1943, 47–8) which would support a Scandinavian connection, but the identification needs to be verified by modern scientific analysis.

Six caves located not far from Portbraddan Cave in the Ballintoy area were also inhabited in Early Medieval times, suggestive of a local trend. The sites – Potter's Cave, Park Cave, Chimney Cave, Boat Cave, Masked rock shelter and Boheeshane Bay Cave 2 – are all sea caves located in cliffs that front onto the beach overlooking the North Channel. This boundary location means that the caves may not have been captured within any townland or territorial division; they may have been outside of owned property. As a consequence, the caves were probably attractive dwelling places for landless or itinerant individuals: liminal places for liminal people. Souterrain Ware was found in abundance at each cave during excavations in the 1930s (Jackson 1933a; 1934a; 1936a; 1938). Recent analysis has led to the identification of fourteen pots from Park Cave, five vessels from Chimney Cave, nine pots from Boat Cave, three vessels from Masked rock shelter, and one vessel from Boheeshane Bay Cave 2 (Kyle forthcoming). The quantity of pottery suggests long-term or repeat occupation where food was cooked and stored. Some smaller vessels, such as a cup from Potter's Cave, may have been used to serve condiments. Evidence of repaired cracks in some vessels suggests they were used for dry storage (*ibid.*). A substantial quantity of Souterrain Ware pottery was also recovered from Dunseverick Cave, not far from the Ballintoy caves, and has similarly been interpreted as indicative of habitation (McConkey 2012, 196–7).

The stratigraphy in Boat Cave revealed intense habitation and multi-phase activities (Jackson 1936a; 1938). The occupants of this and the neighbouring caves exploited the abundant locally available marine resources. A series of 'burnt layers' (0.9m thick) – successive lenses of charcoal and ash – contained numerous fish bones (cod and gurnet), seashells, large quantities of animal bone (cattle, sheep and pig), slag, worked antler and animal bone, a knife handle, a double-sided bone comb, a whetstone and Souterrain Ware. The burnt layers were sealed by large slabs of rock, possibly an effort at crude paving or flooring of the cave interior. A series of large boulders ran across the cave entrance suggesting the presence of a wall. Another burnt layer (0.08m thick) produced dumps of seashells in addition to charcoal, lignite fragments, animal bones (cattle, sheep and pig), cod bones, a rotary quernstone fragment, hammerstones, a whetstone, a bone spindle whorl, two wooden knife handles, worked antler and

bone, a bone pin, a bone point, a slate disc, an iron fish hook, an iron harpoon head, an iron wedge, an iron knife, slag, possible furnace bottoms, an iron spike, and further Souterrain Ware (Jackson 1936a; 1938). In the 19th and 20th century fishermen stayed in caves along the west coast of Jura, Scotland while fishing inshore waters (Leitch and Tolan-Smith 1997, 125), and in recent decades fishermen have used caves along the Antrim coast for short-term shelter (see Chapter 10). There is every likelihood that Boat Cave and the adjacent sites offered similar accommodation to Early Medieval fishermen, as suggested not only by the fish bones and seashells, but also by the fish hook and harpoon head. The bone pins and points may have been employed to mend nets, and the knives to fillet fish.

Occupation of caves was not confined to coastal or marginal areas. Ballynamintra Cave, Co. Waterford is located in an area of good agricultural land with plentiful evidence of Early Medieval settlements in the wider environs. Late 19th century excavations in the cave revealed a range of Early Medieval artefacts implying occupation, including a pronged bone object (for fishing?), a bone toggle, two bone points, whetstones, rubbing stones and hammerstones (Adams *et al.* 1881). An Early Medieval decorated bone knife handle and a piece of worked bone were found in a crevice in the cave wall 10m inside cave entrance, where they may have been carefully placed by the person who lived there over a millennium ago. A whetstone and iron knife blade from Barntick Cave, Co. Clare could conceivably date to any historic period, but the Early Medieval material from adjacent caves suggests contemporaneous activities (Scharff *et al.* 1906).



GLENCURRAN CAVE: CASE STUDY OF AN EARLY MEDIEVAL HABITATION SITE

Glencurran Cave, Co. Clare provides valuable insights into how some caves were modified and adapted as dwelling places (Dowd 2007b; in prep.) (Figure 8.4). Radiocarbon dates suggest at least two main periods of habitation, though sporadic and repeated occupation over several centuries is highly likely as the dates span the late 7th to the mid 12th centuries (for full detail of all dates in this section, see Table 8.1). During one of the earliest historic phases, a number of modifications were made to the outermost chamber of the cave where domestic activities were concentrated. A low drystone wall was constructed across the entrance which acted as a plinth for a door as indicated by an *in situ* spud stone. A cattle bone from the ground surface on which the wall was constructed returned a date of 1253 ± 25 BP (UBA-13248). An iron barrel padlock key found deeper in the cave indicates the presence of a wooden door. Immediately inside the cave entrance, boulders had been removed to increase the available living space. The resultant small chamber (2.8m $\times$ 3.6m) was defined by the cave walls to the west and east, the entrance walling to the north, and a crude arrangement of upright stones to the south. The chamber floor had been deliberately levelled. Animal bones from this chamber were dominated by prime meat-bearing elements of sheep, pig and cattle, revealing that meals were consumed here (McCarthy 2005). One of the butchered sheep bones returned a date of 1152 ± 24 BP (UBA-19262). A bronze ringed pin was also found carefully concealed beneath a large flat slab.

A range of every-day activities took place outside Glencurran Cave on a natural D-shaped platform that had been modified and formally defined. Deposits from inside the cave, possibly from the entrance chamber, were brought out and used to level the platform surface. A series of limestone slabs, some set on edge, defined the northern side of this area enclosing a space 2.2m $\times$ 5.8m. A hearth, defined by a crude setting of stones, occurred immediately outside the cave mouth abutting the entrance walling. Charcoal from the hearth returned a date of 1230 ± 20 BP (UBA-13461), roughly contemporaneous with the entrance walling. A range of domestic activities took place on the platform as indicated by the recovery of a stone spindle whorl, a socketed iron sickle, a tanged iron knife and an iron perforated band (possibly the rim of a wooden vessel) (Figure 8.5). Faunal remains represented primary butchery waste (peripheral elements and cranial fragments) of cattle, sheep and pigs linked to local slaughter, preparation of food and the disposal of domestic refuse (McCarthy 2005). Cut and knife marks were noted on almost 30 bones from the

platform reflecting skinning, meat removal and the dismemberment of carcasses and their division into suitable portions for cooking (*ibid.*). A butchered cattle bone returned a date similar to that from the hearth and entrance walling of 1219 ± 23 BP (UBA-19261).

Site	Material	$\delta^{13}\text{C}$	Lab code	Measured radiocarbon years (BP)	Calibrated radiocarbon date (2 σ) AD
Clare, the Catacombs (M. Dowd)	Human, Adult male skull	-20.96	GrA-22110	1200 $\pm$ 50	670–890
	Human, Adult R ulna	-20.4	Beta-277394	1160 $\pm$ 40	775–980
Clare, Glencurran Cave (M. Dowd)	Seahell, Scallop	-2.0	UBA-19266	1567 $\pm$ 25	marine reservoir correction not applied
	Red deer, Antler	-21.42	UBA-13245	1386 $\pm$ 22	615–670
	Horse, Femur	-23.8	UBA-9973	1259 $\pm$ 25	670–860
	Cow, Mandible (entrance walling)	-20.0	UBA-13248	1253 $\pm$ 25	675–860
	Charcoal (<i>Ulmoides</i>) (hearth)	-29.6	UBA-13461	1230 $\pm$ 20	690–875
	Cow, Butchered sacrum	-21.8	UBA-19259	1218 $\pm$ 25	710–890
	Cow, Butchered femur (platform)	-21.6	UBA-19261	1219 $\pm$ 23	710–885
	Sheep, Butchered skull (entrance chamber)	-22.9	UBA-19262	1152 $\pm$ 24	780–970
	Charcoal (<i>Salix/Populus</i>) (torch)	-27.1	UBA-13462	1065 $\pm$ 19	900–1020
	Sheep, Butchered tibia	-18.3	UBA-19260	979 $\pm$ 28	995–1155
	Pig, Butchered humerus	-21.4	UBA-19258	942 $\pm$ 23	1030–1155
Clare, Robber's Den (M. Dowd)	Human, Adult female mandible	-20.5	Beta-277382	1210 $\pm$ 40	690–935
Kerry, Cloghmore Cave (Connolly, Coyne and Lynch 2005)	Human, Sub-adult tibia *	-27.3	Beta-137052	1550 $\pm$ 50	410–610
	Human, Adult L calcaneus *	-24.9	Beta-137053	1330 $\pm$ 50	605–805
	Human, Adult R humerus *	-26.7	Beta-137057	1360 $\pm$ 40	605–770
	Human, Sub-adult R femur	-21.8	Beta-137049	1260 $\pm$ 50	665–880
	Human, Adult L ulna	-23.2	Beta-137044	1270 $\pm$ 40	660–870
	Human, Adult R femur	-21.2	Beta-137051	1220 $\pm$ 40	685–890
	Human, Adult L talus	-21.8	Beta-137045	1190 $\pm$ 50	690–970
	Human, Sub-adult L humerus	-22.2	Beta-137047	1210 $\pm$ 40	690–935
	Human, Sub-adult R ulna	-21.9	Beta-137048	1190 $\pm$ 40	695–965
	Human, Adult L femur	-21.3	Beta-150538	1180 $\pm$ 40	715–970
	Human, Adult thoracic vertebra	-21.3	Beta-137046	1140 $\pm$ 40	780–985
	Human, Adult femur	-21.6	Beta-132903	1150 $\pm$ 40	780–980
	Human, Adult R femur	-21.2	Beta-150539	1020 $\pm$ 40	900–1150
	Charcoal	-26.7	Beta-137054	1130 $\pm$ 60	730–1020
	Charcoal	-26.0	Beta-137055	1240 $\pm$ 50	670–890
	Charcoal	---	Beta-150535	1160 $\pm$ 60	690–995
	Charcoal	---	Beta-150536	1150 $\pm$ 60	715–1015
	Charcoal	---	Beta-150537	1140 $\pm$ 60	720–1020
	Animal long bone, burnt *	-26.6	Beta-137056	1170 $\pm$ 60	690–990
Kerry, Dunkerron Cave (M. Dowd)	Human, Adult thoracic vertebra	-21.2	Beta-277381	1060 $\pm$ 40	895–1025
Kerry, Ross Island Cave (O'Brien and Conner 2008)	Cow, Rib	-22.29	GrA-35576	980 $\pm$ 30	990–1155
	Cow, Rib	-21.82	GrA-35580	860 $\pm$ 30	1050–1260
Kilkenny, Dunmore Cave (M. Dowd, Dowd <i>et al.</i> 2007; Drew and Huddart 1989)	Human, Juvenile (1–2 yrs) L radius	-22.0	UBA-7283	1151 $\pm$ 31	780–975
	Human, Infant (6–12 mths) R tibia	-21.0	UBA-7279	1132 $\pm$ 32	780–990
	Human, Juvenile (2–6 yrs) R radius	-21.0	UBA-7280	1128 $\pm$ 33	780–990
	Human, Adult R humerus	-23.0	UBA-7282	1125 $\pm$ 31	785–990
	Human, Adult R navicular	-21.0	UBA-7278	1100 $\pm$ 32	890–1015
	Human, Juvenile (6–7 yrs) R femur	-22.0	UBA-7281	1091 $\pm$ 31	890–1015
	Human, Adolescent (11–16 yrs) L metatarsal	-20.0	UBA-7284	1091 $\pm$ 30	890–1015
	Charcoal	—	—	1230 $\pm$ 110	625–1018
Sligo, Cave O, Kesh (M. Dowd)	Human, Adult L tibia	-23.1	UBA-6680	963 $\pm$ 33	1020–1160
Sligo, Plunkett Cave, Kesh (M. Dowd)	Human, Adult R upper molar	-21.13	GrA-22111	1450 $\pm$ 50	440–670

* The $\delta^{13}\text{C}/\delta^{12}\text{C}$ ratios indicate that the bones had undergone some level of diagenesis and/or that the depleted ratios may indicate the presence of exogenous carbon (Ron Hatfield pers. comm. (BETA Analytic Inc.)). These four bones came from very wet and acidic (bat guano) contexts in Cloghmore Cave (Michael Connolly pers. comm.).

Table 8.1 Early Medieval radiocarbon dates from caves

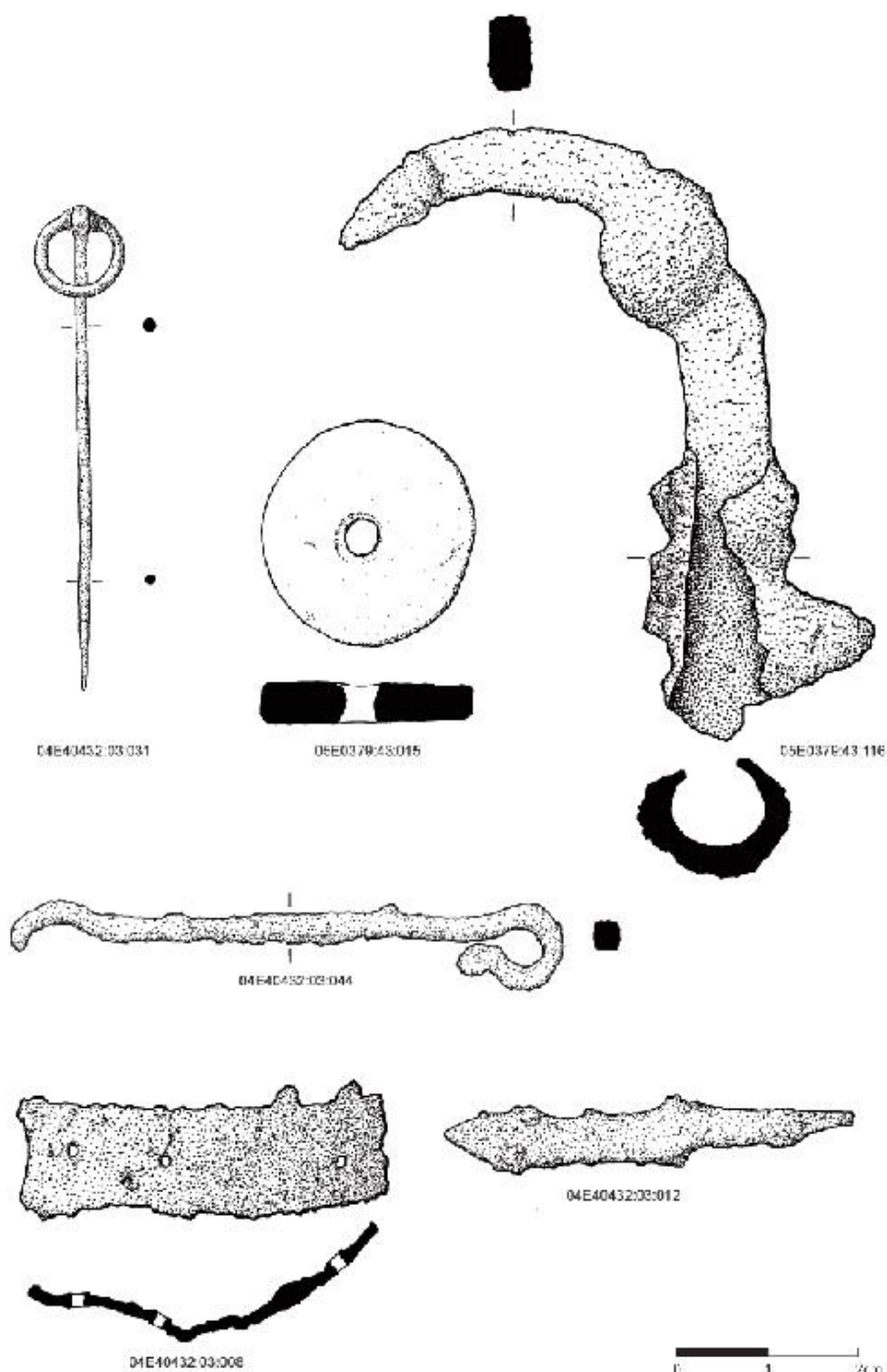


Figure 8.5 Early Medieval artefacts from Glencurran Cave: copper alloy ringed pin, iron sickle, stone spindle whorl, iron barrel padlock key, iron tanged knife, iron perforated strap (Illustration Abigail Brewer)

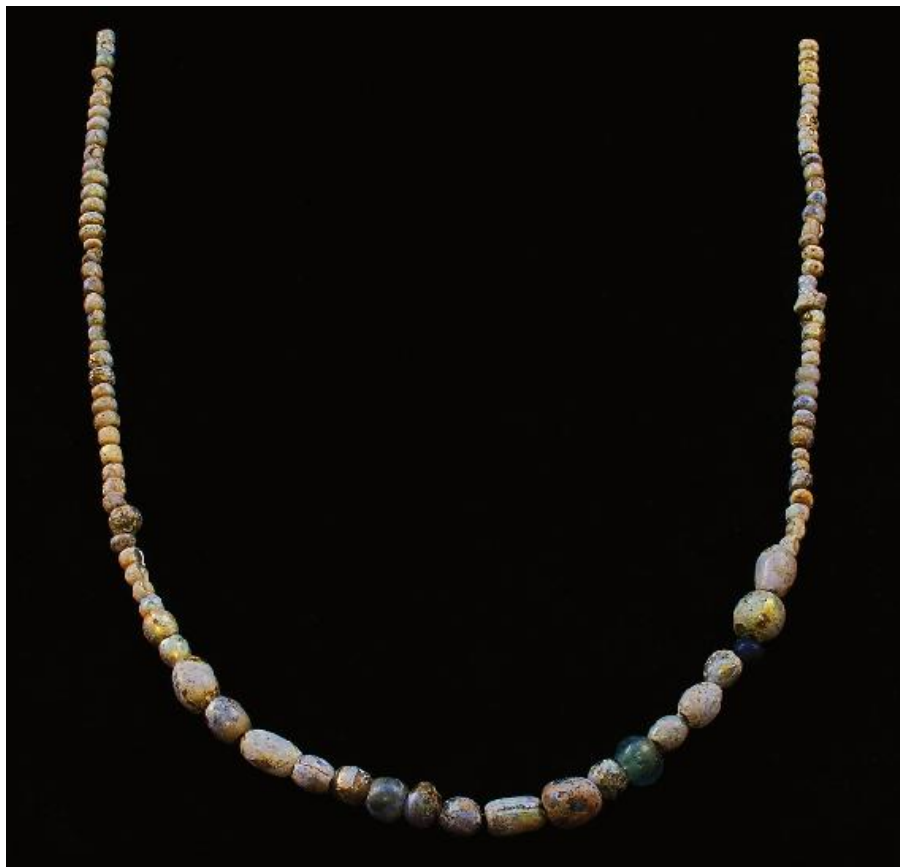


Figure 8.6 Viking necklace from Glencurran Cave (Photo Thorsten Kahlert)

The close proximity of Glencurran Cave to the imposing fortified Cahercommaun cashel highlights the possibility that the cave was occupied by someone who worked at this high status, prosperous and politically powerful Early Medieval settlement. This employment may have been seasonal in nature; harvest time is suggested by the sickle. The discovery of a Viking necklace deep inside the cave raises other possibilities, however (Figure 8.6). The necklace, one of the most impressive examples known from Ireland or Britain, is of 10th century date. The most reasonable explanation for such a prestigious find located a significant distance from Viking settlement is that it represents a valuable item, possibly stolen from a Gaelic or Viking site, and then concealed but never retrieved. It may have come from Cahercommaun and was possibly hidden by the occupant of Glencurran Cave. A wooden torch radiocarbon dated to 1065 ± 19 BP (UBA-13462) was found approximately mid-way between the entrance chamber and the location of the necklace; it may have provided light to someone travelling deeper underground.

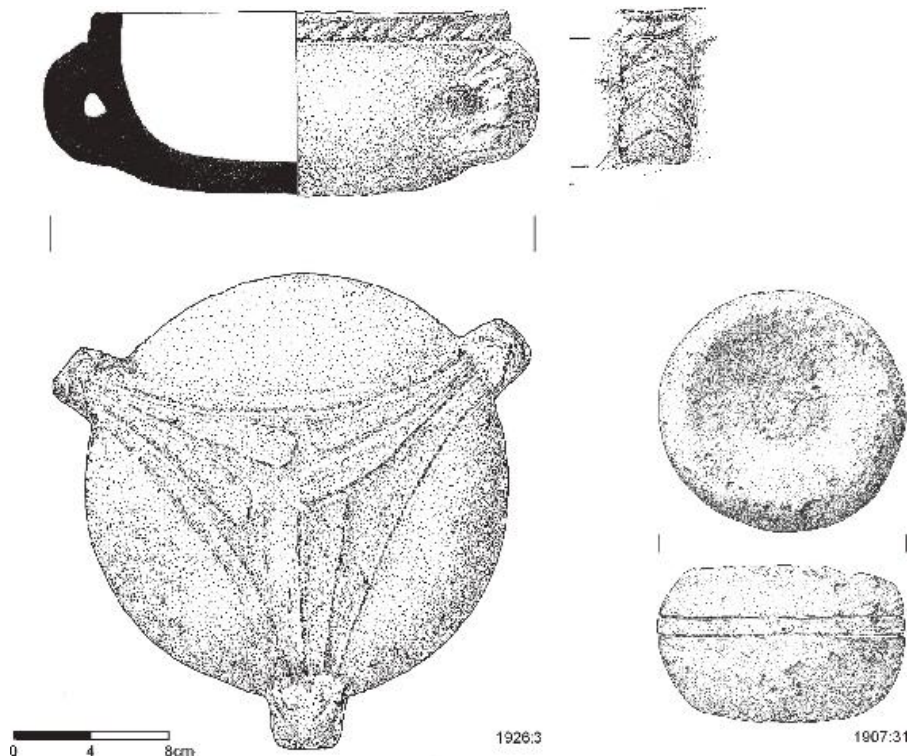


Figure 8.7 Stone hanging bowl from Ballynacourty Cave, Co. Waterford and stone lamp from Bats' Cave, Co. Clare (Illustration Malgorzata Kryczka)

LIGHTING THE DARK

An aspect of Irish cave archaeology that must have been commonplace, but is virtually invisible in the archaeological record, is lighting. No lamps or torches of prehistoric date have yet been recovered from caves though these were clearly required, particularly at times when people travelled into the darkest parts of caves, such as during the Late Bronze Age. Most torches were probably simple organic arrangements, the only surviving evidence of which may be flecks or fragments of charcoal. Wooden torches and grease lamps with wicks have been documented from Palaeolithic caves (Clottes 2003, 12), and in North America indigenous groups visiting caves in the 15th century AD used torches made from bound bunches of cane (Douglas, Roebuck and Roebuck 2008). In Ireland it is not until the Early Medieval period that we find evidence for how people illuminated caves. The aforementioned torch from Glencurran Cave consisted of a single chunk of willow or poplar (10cm × 4cm × 4cm) that had been jammed into a prehistoric cairn in the 10th century AD, presumably to light deeper parts of the cave. Butchered animal bones

(UBA-19258; 19259; 19260) were found nearby (Table 8.1). In the south-east of the country, a stone hanging bowl of 8th or 9th century date, as well as human and animal bones, were discovered in a cave at Ballynacourty, Co. Waterford in 1924 (Figure 8.7) (Raftery 1966, 33–4; Ragnall Ó Floinn pers. comm.). The human bones were said to represent two individuals but cannot be located at present (Martin 1935, 154). It is possible that this site has been confused with Quinlan's Quarry Cave located in the same area in which the remains of three prehistoric skeletons were found (see Chapters 5 and 6). The context of the Ballynacourty lamp is unclear, but at the very least it suggests Early Medieval activities in a cave in this locality. A basal stone lamp of 11th–12th century date (Figure 8.7) found 7.5m inside the entrance of Bats' Cave, Co. Clare is likely to have been associated with short-term shelter contemporaneous with a stick pin found nearby. A fireplace, a 'hard trodden floor' and butchered animal bones were located at the entrance and possible Early Medieval finds included two whetstones, a bone pin, worked bone and a fragment of iron (Scharff *et al.* 1906, 14, 73).

WHO LIVED IN CAVES?

Edwards (1990, 47) has posited that in Early Medieval Ireland caves would have functioned as settlements for those 'who lacked the prestige, wealth or need for more impressive habitations'. This may be the case but the presence of objects such as decorated bone combs, ringed pins and jet bracelets in some cave assemblages seems to indicate free clients, perhaps, for instance, of the *ócaire* class (Dowd 2002, 90). These individuals were probably of low social standing but were not necessarily the lowest stratum in society – unfree individuals would have been 'archaeologically invisible' (Mytum 1992, 136). Branigan and Dearne argue that assemblages from 97 Romano-British cave sites reveal that those who inhabited caves 'were in no sense deprived or uncivilised peasants' (1991, 30).

The general absence of agricultural implements related to tillage – ploughshares, reaping hooks and billhooks – may indicate that those who lived in caves did not grow or harvest their own cereals and did not own their own land. Some debris probably reflects short-term shelter by labourers who moved into a particular area at certain times of the year for employment, such as at harvest time or as part of transhumance activities. Itinerant metalworkers and smiths may also have availed of caves. Ethnohistorical data from Scotland reveals that travellers and peddlers lived in caves on a regular but intermittent basis; occupation was usually for a few months at a time, particularly during the summer (Leitch and Tolan-Smith 1997, 125). Habitation layers in caves on the Antrim coast may relate to fishing activities, just

as Bronze Age people had availed of these same sites in earlier millennia (see Chapter 6). Some of those who inhabited caves may have been on the margins of society, social recluses or loners who shunned community living or may have been shunned by others. In historic times, people who occupied Scottish caves over long periods were often loners (*ibid.*, 125).

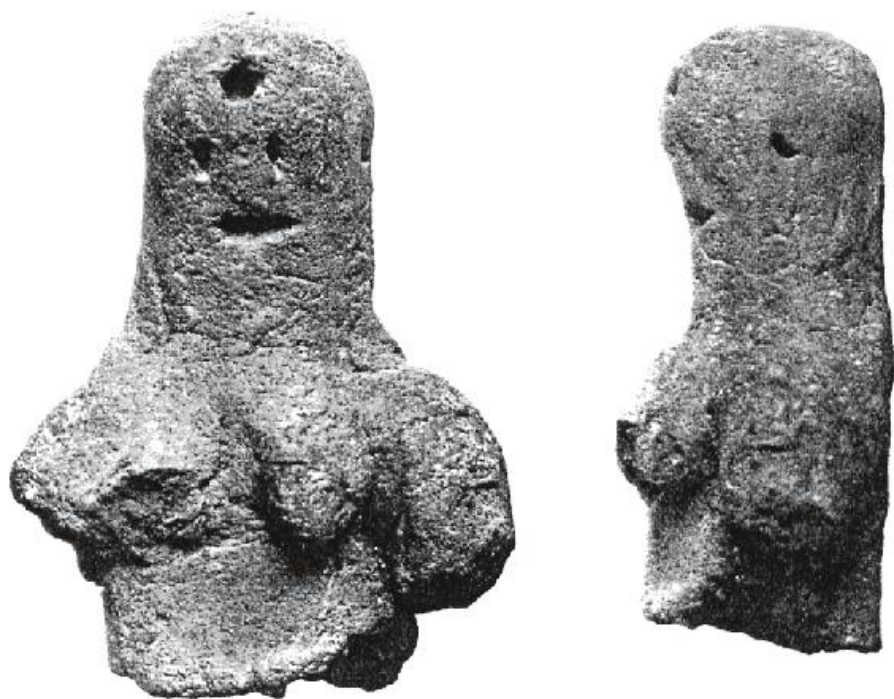


Figure 8.8 Clay female figurine from Potter's Cave, Co. Antrim (Jackson 1934a)

There is some indication that caves were occasionally sought out by craft-workers for specialised activities, the most notable example being Potter's Cave, Co. Antrim. Excavations outside the cave entrance revealed the production of Souterrain Ware on a seemingly commercial scale. This is significant considering the paucity of known Early Medieval pottery workshops in Ireland. Kyle (forthcoming) has identified at least 152 different vessels at Potter's Cave from an assemblage of approximately 2000 sherds. Evidence of sooting, carbonised residues, or repairs were apparent on 28 pots. Eleven amorphous fragments of fired clay that had been worked or handled (e.g. kneading impressions) were also recovered and are probably by-products of pottery production (*ibid.*). Kyle suggests that Potter's Cave would have provided the shelter required for both drying and firing pottery vessels. No archaeological excavations have been undertaken

inside the cave but it was almost certainly used in the production process, or perhaps the potter resided there. A rectangular drystone structure (2.4m × 1.2m) that had been built against the cliff wall near the cave entrance was originally interpreted as a pottery kiln (Jackson 1934a, 107; Ryan 1973, 622, 626), though Kyle (forthcoming) regards this as dubious. The structure was double-walled, comprising upright stone slabs set on edge, and was partially roofed. Souterrain Ware, burnt clay and charcoal were found in and around it.

Another find from Potter's Cave that appears to relate to pottery production was a fired clay female figurine, dubbed a 'goddess' at the time of excavation (Figure 8.8) (Jackson 1934a, 105–6; 1934b). Only the upper part of the body was recovered. It appears to have been constructed in sections, with the neck and head applied to the torso, and the arms and breasts also separately attached. Facial features are indicated by crude impressions and incised lines, and a large circular impression is located at the centre of the forehead. Repairs were evident – part of the left arm and breast had been reattached (Kyle forthcoming). There are no Irish or Scottish parallels for the object and its function and symbolism are unknown, but it may represent a rare instance of experimentation with clay by an Early Medieval potter (*ibid.*). It may have been some form of statue or icon, or even a child's toy.

The use of caves for ironworking in Early Medieval times is suggested in instances where diagnostic artefacts are found in association with metallurgical remains. Not far from Potter's Cave, slag and a possible furnace bottom were found in Boat Cave, and one of the Souterrain Ware vessels had vitrified material on both the internal and external surfaces suggesting that it had been in close proximity to a metalworking area (Kyle forthcoming). Small quantities of slag were also recovered from the nearby Portbraddan Cave, as well as from Elderbush Cave, Co. Clare, Ballynameelagh Cave 1, Co. Waterford and Killuragh Cave, Co. Limerick but no metalworking structures have been discovered at any of these sites and there are no Early Medieval finds from Killuragh Cave. It might seem implausible that the dangerous process of metalworking should take place in small confined spaces. However, caves offered protection from the elements within a fire-proof enclosure and several caves in Britain have been identified as places where ironworking took place. Large quantities of slag and a smelting furnace were discovered in a cave on Skye, Scotland; abundant slag, partially melted ore, iron ore, charcoal and a possible stone-lined furnace were recorded in Rowberrow Cavern, Somerset; and iron slag and haematite were discovered in Hoyle's Mouth Cave in Tenby, Wales (Jackson 1938). Caves such as Poole's Cavern and Thirst House, Derbyshire and Wookey Hole, Somerset

were used for metalworking in Roman times (Branigan and Dearne 1992, 26).

BANDIT'S LAIRS

A significant corpus of 19th and 20th century folk traditions link political fugitives, outlaws and criminals to caves (see Chapter 10), and it is plausible that some Early Medieval material reflects the activities of similar individuals, particularly in instances where precious objects have been discovered. This may explain the exceptional finds from Park North Cave, Co. Cork and Kilgreany Cave, Co. Waterford. Park North Cave afforded a roomy living space (9.2m × 5m × 3m high) and trial trenches opened in 1942 revealed a series of habitation strata. The most important, culturally, was a charcoal-rich stratum up to 0.28m thick called the 'Black Layer', which was in effect a series of charcoal lenses interspersed with washes of clay suggesting different phases of activity. Burnt and butchered animal bones were recovered, primarily cattle and sheep, as well as a bone needle, two bone pins, a bone comb of 8th–10th century date, a stone spindle whorl, two whetstones, a hammerstone, three iron knives, an iron nail and iron fragments (Coleman 1942). Coleman (*ibid.*, 76) remarked that the outer chamber provided 'shelter, adequate living space and a convenient water supply' as pools of water occurred within the cave. In Kilgreany Cave the Early Medieval level ('Black Earth and Stones') appears to have been largely confined to the inner chamber of the cave. Three substantial hearths were located here as well as shellfish and bones of domesticates. The Early Medieval artefacts included two ringed pins, a lignite bracelet fragment, 18 whetstones, 10 spindle whorls, an iron knife, bone points, a bone needle, fragments of rotary quernstones, a bone comb of 5th–10th century date, and worked bone and antler (Movius 1935; Dowd 2002).

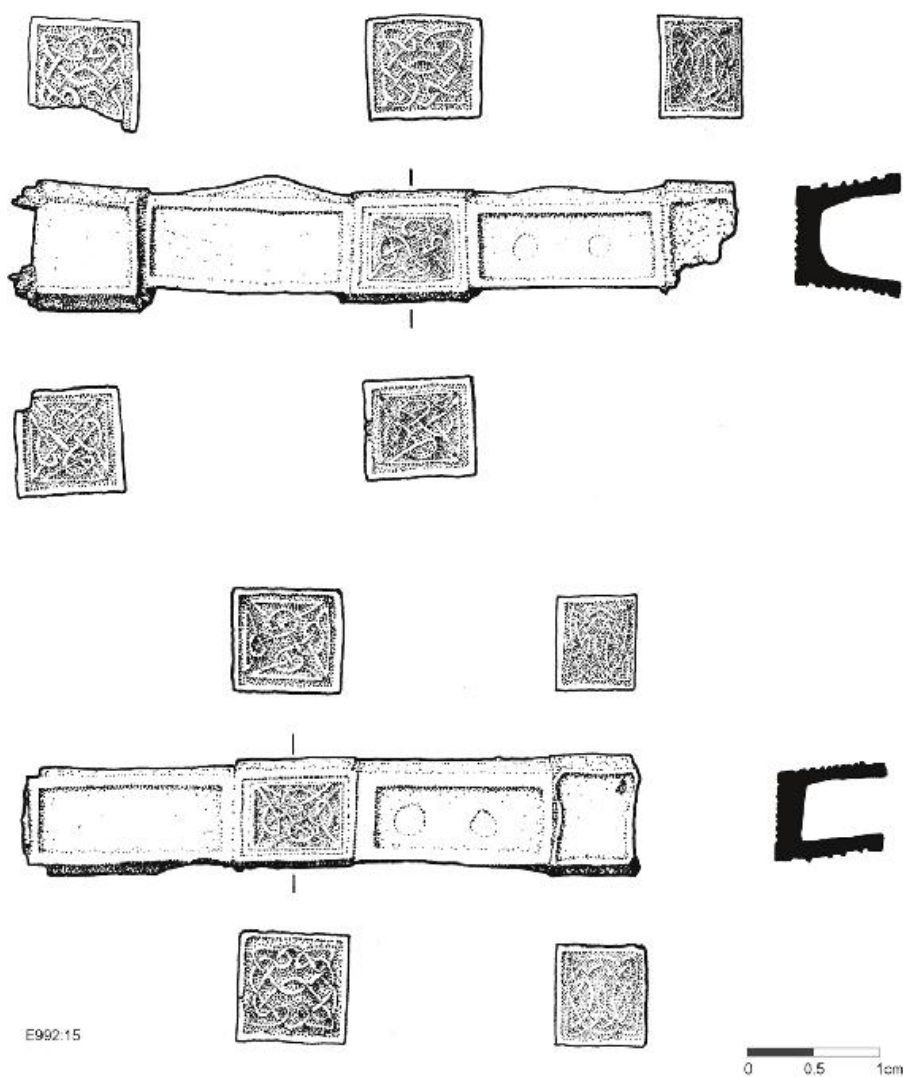


Figure 8.9 Early Medieval shrine fragment from Park North Cave, Co. Cork (Illustration Abigail Brewer)

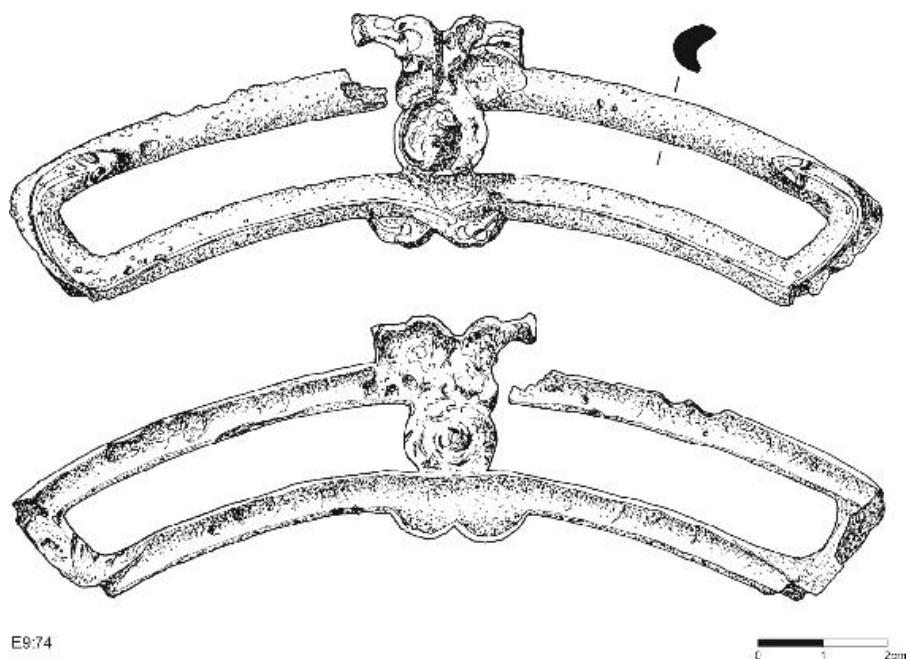


Figure 8.10 Early Medieval shrine fragment from Kilgreany Cave, Co. Waterford (Illustration Malgorzata Kryczka)

Were it not for the discovery of shrine fragments from the occupation layers in Park North Cave and Kilgreany Cave (Figure 8.9), it might be assumed that the occupants were no different from those who sought shelter in caves elsewhere in Ireland at this time. Part of the ridge-mount of a house-shaped shrine of 8th or early 9th century date, and three associated angled strips, came from the 'Black Layer' in Park North Cave approximately 4.5m–5m inside the entrance (Figure 8.9) (Murray forthcoming). The ridge-pole was gilded, appears to have been enamelled, and was set with silver foil or gold filigree. It seems that the shrine was dismantled and stripped of its precious metal and some of its decorative mounts, leaving only part of the ridge pole in the cave. This may have been one of the largest and most richly decorated of Irish house-shaped shrines (*ibid.*). At Kilgreany Cave what seems to be the mount of a bell-shrine, possibly of a very large hand-bell of 8th or early 9th century date, was recovered (Figure 8.10) (Movius 1935; Murray forthcoming). Again, it is likely that this shrine was broken up and only a fragment was left in the cave.

The shrine fragments from these two caves probably represent ecclesiastical metalwork that had been looted from church sites (Dowd 2002, 91), and Murray (forthcoming) has convincingly argued that Vikings were responsible for the attacks. Vikings were particularly active in the east Cork and west Waterford region during the 9th

century and the two caves, just 55km apart and near the coast, are located between the Viking towns of Cork and Waterford. Murray suggests that Park North Cave and Kilgreany Cave were used for temporary accommodation or as hideouts by Viking groups in the 9th century. The shrines may have been broken up inside the caverns, with the greater parts removed elsewhere, or portions may have been concealed or lost inside the caves (*ibid.*). Parallels are known from other parts of the Viking world. Excavations in Surtshellir Cave, Iceland have revealed this to be a fortified outlaw Viking settlement of late 9th–10th century date; this is supported by Medieval texts which claim that the cave was a bandit's lair. A substantial fortified wall and a large underground house occurred 100m and 200m respectively inside the cave entrance. Material recovered included butchered domesticated bones, midden material, occupation floors and fire-starter fragments (Ólafsson *et al.* 2010).



Figure 8.11 Viking arm-rings (1907:6, 1902:110) from Alice and Gwendoline Cave, Co. Clare (Photo NMI)

Another theory that cannot be ruled out at present is that the habitation debris at Park North and Kilgreany may reflect occupation by eremites, and thus the shrine fragments may relate to religious activities in caves (see above).

That caves were appropriated by Vikings, bandits or outlaws may explain the occurrence of other prestige finds in caves. Two Viking arm-rings of late 9th to mid 10th century date were discovered in different parts of Alice and Gwendoline Cave, Co. Clare during antiquarian excavations (Figure 8.11) (Sheehan 2000, 34). A gold broad-band penannular arm-ring was found approximately 16.5m inside the entrance by the south wall of the cave ‘just buried under the surface of the earth, where it had probably been left covered ... between small stones, with a small slab laid overhead’ (Scharff *et al.* 1906, 5, 68). Nearby was an amber bead of unknown date. A copper alloy coiled annular arm-ring was discovered *circa* 22.5m inside the

entrance in a mass of earth and stones that had fallen into the cave from aboveground via an opening in the cave roof (*ibid.*, 63, 68). This bracelet may have been part of the collapse, but more likely it had been deliberately shoved into the opening by someone inside the cave and later fell in with the aboveground material. Though separate deposits, the arm-rings may have been concealed at the same time as they occurred in the same passage. There is also a suggestion that Alice and Gwendoline Cave was occupied; possible domestic debris includes whetstones, several bone pins, sawn and worked animal bones and iron nails. It is worth noting that a Viking copper alloy stick pin of probable 11th or 12th century date was found at the entrance to Bats' Cave, just 1.75km from Alice and Gwendoline Cave, and settlement debris was also recovered here (Sheehan forthcoming). Could these two caves have been occupied by individuals, perhaps Vikings, who concealed their objects of wealth but never returned to retrieve them?

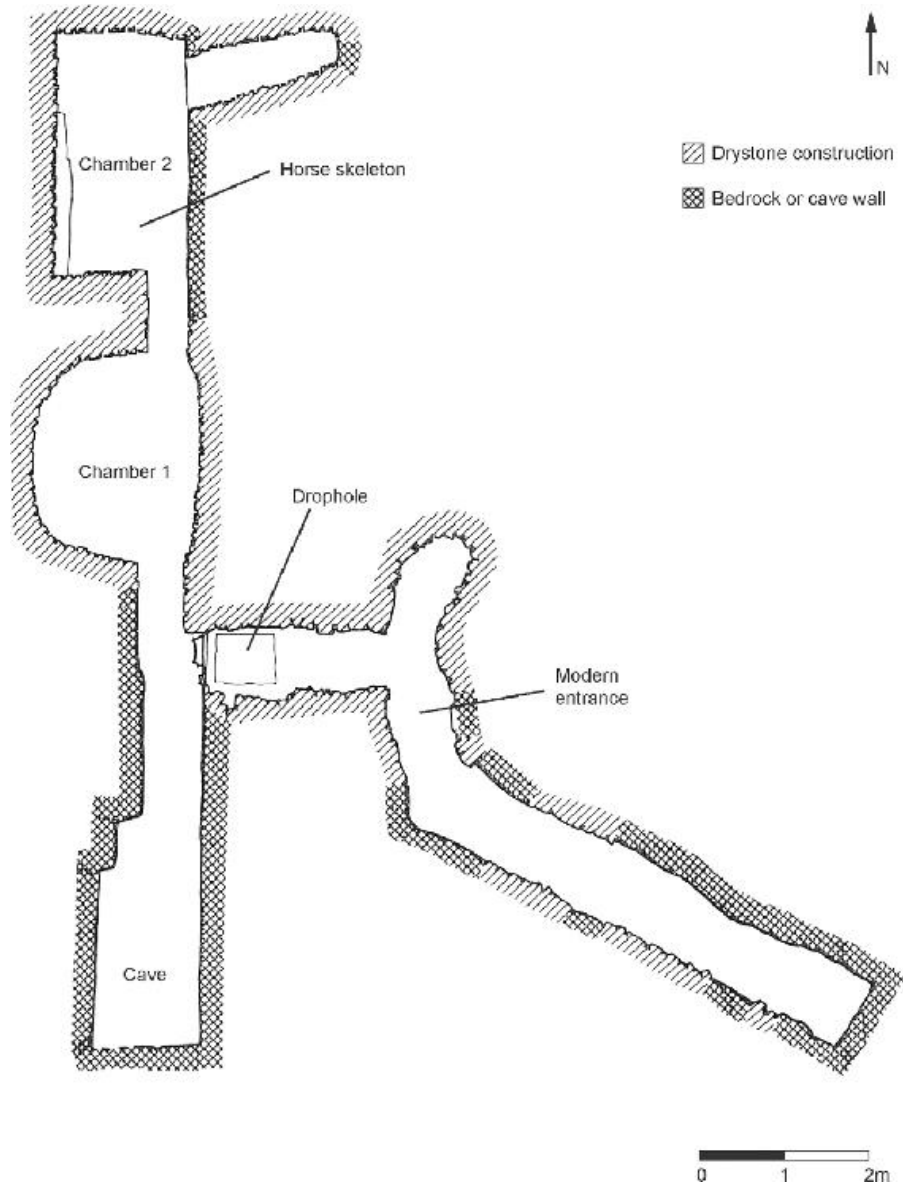


Figure 8.12 Cave-souterrains at Ballyegan, Co. Kerry (Byrne 1991)

CAVES, SOUTERRAINS AND STORAGE SOLUTIONS

When not used for occupation, some caves influenced the location of aboveground enclosed settlements. A number of ringforts and cashels have been identified that were deliberately constructed to enclose entrance openings into caves. One such example is a cashel at Ballyegan, Co. Kerry which surrounds the opening into a limestone cave against which a souterrain had been constructed (Figure 8.12). As Gorham (1914/6, 16) conjectured, ‘the conclusion is irresistibly

forced upon us that the situation and dimensions and nearness to the surface ... of the natural cave have ... determined the position and locality of the whole fort'. By so doing, occupants of the settlement could avail of a subterranean space – effectively a ready-made souterrain – that could be adopted for housing young animals or fowl, concealing wealth, holding hostages or for storage. A well-chosen cave provides a dark, cool, dry space with a constant temperature of about 12°C which is ideal for food preservation. As hideaways, most caves are more extensive than souterrains and offer greater opportunity for concealment of wealth or people. Some caves also contain pools of water during wet weather, a valuable resource for people living in settlements aboveground.

In the Dungarvan Valley, Co. Waterford there seems to have been a distinct local trend in the incorporation of caves within settlements. Three sites – Carrig-murrish Cave, Oonaglour Cave and Brothers' Cave – consist of circular openings on the ground surface (collapsed dolines *circa* 10m in diameter) that lead via vertical descents (*circa* 8m deep) into large subterranean systems. Current evidence suggests that during the Early Medieval period settlement sites (probably ringforts) were constructed either adjacent to, or surrounding, the openings into these caves. The entrances to Brothers' and Oonaglour are just 45m apart, while Carrigmurrish Cave lies less than 1.5km to the east-north-east. The Early Medieval settlements above Oonaglour Cave and Brothers' Cave were at some point totally obliterated and the swallowholes infilled, possibly during 19th century landscaping of the grounds of Whitechurch House in which the caves are located; by 1906 there was no surface trace of either cave (Forsayeth unpublished). The enclosure surrounding Carrigmurrish Cave is denuded and overgrown but would originally have been prominently located. The Early Medieval assemblages from these three caves were introduced when the swallowholes were backfilled, seemingly with material from the levelled settlements overhead.

The Early Medieval material in Oonaglour Cave was concentrated beneath the entrance opening and included whetstones, worked bone, slag, spindle whorls, hammerstones, a stone crucible, large quantities of animal bones, seashells and charcoal. The vertical drop into Brothers' Cave was completely choked with a mass of earth referred to as 'the Great Slide'. It contained charcoal, animal bones, seashells, jet bracelet fragments, stone discs, spindle whorls, a whetstone, iron objects and slag (Forsayeth 1931). The 'kitchen midden' in Carrigmurrish Cave descended at an angle from the ground surface opening to the cave floor beneath. Approximately 500 Early Medieval artefacts were recovered here during excavations in 1881 and *circa* 1910 (Figure 8.13) (Ussher 1881a; 1886; Power 1928). The

assemblage included whetstones, stone discs, spindle whorls, fragments of rotary quernstones, bone needles, bone pins, combs, knife handles, large quantities of worked and sawn animal bone, iron nails, iron knives, an iron axehead, a decorated bronze buckle, an iron bow saw, an iron plough share, a shield boss, ringed pins, slag, a tuyère and vast quantities of animal bones. The Carrigmurrish combs provide an indication of the date of the settlement overhead: five of the combs cannot be dated closer than the 5th–10th century, but one comb is of 9th–12th century date while another reflects an 11th–13th century horizon (Dunlevy 1988). Some artefacts suggest that the three settlements belonged to high status and prosperous families. Perforated whetstones from Oonaglour and Carrigmurrish and a Viking shield boss from the latter indicate that these families enjoyed contact and trade with Viking communities.

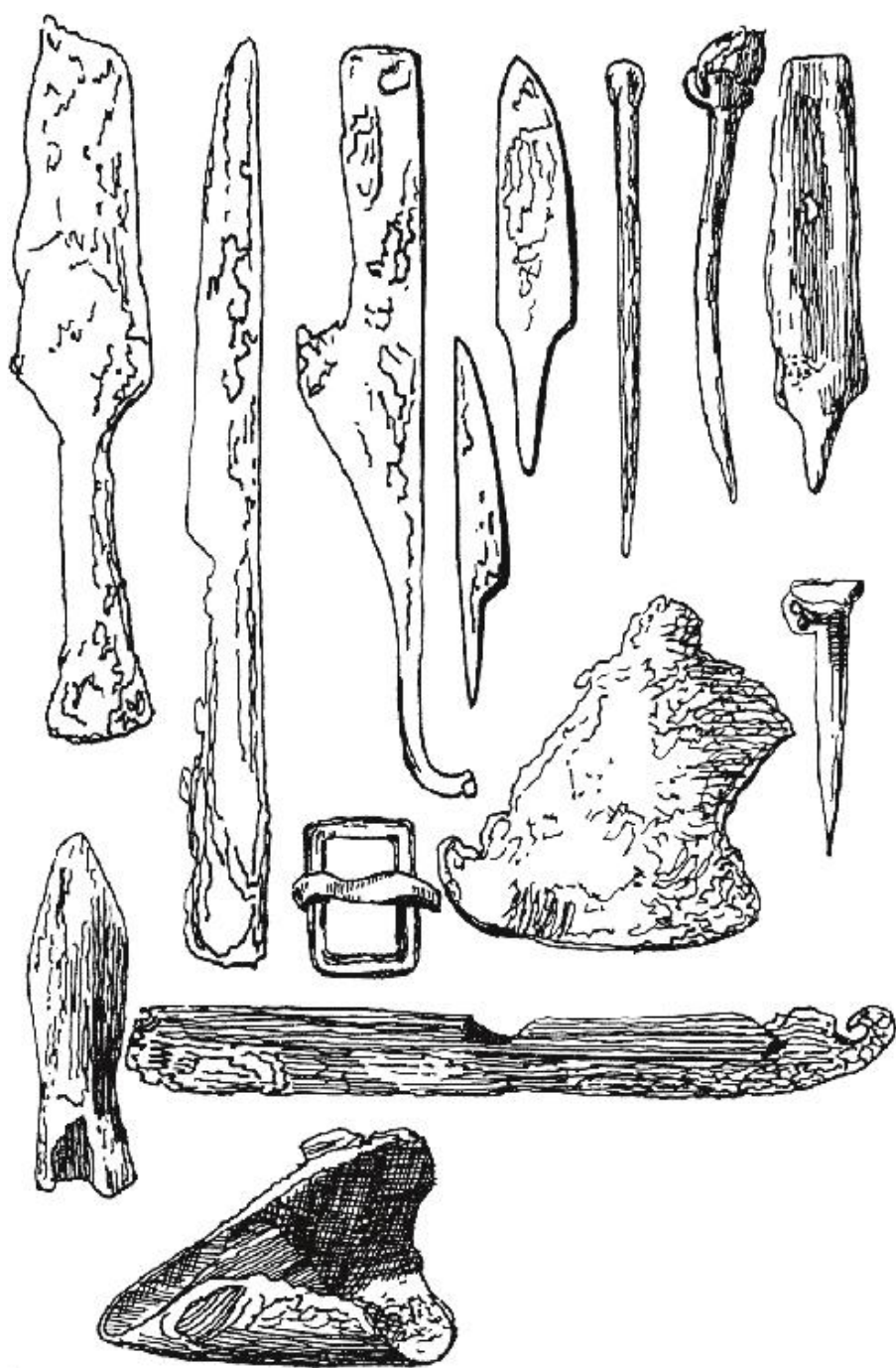


Figure 8.13 Iron artefacts from Carrigmurrish Cave, Co. Waterford illustrated in 1885 by W.F. Wakeman (Ussher 1886). Socketed spearhead (1906:383), socketed knife? (1906:360), blade, knife blade (1906:348), knife blade (1906:349), ringed pin shaft, ringed pin (1906:369), unknown object, socketed arrowhead (1906:384), buckle (1906:378), Viking shield

Early Medieval finds from Ross Island Cave, Co. Kerry and Carrigagour Cave 1, Co. Cork may indirectly reflect the exploitation of caves by those who occupied adjacent settlements with the introduction of domestic debris into the caves after those settlements had been abandoned. Alternatively, these caves, and others, may have been used by Early Medieval people as convenient places in which to dispose of refuse: in recent decades many Irish caves have been used for this purpose. A perforated whetstone, 17 pieces of copper smelting slag, a bone pin and cattle bones of Early Medieval date (Table 8.1) from Ross Island Cave appear to have entered through an opening in the cave roof, or were washed in after having fallen from the overlying escarpment where a souterrain and a possible settlement or smelting area were located. These features seem to have been associated with Early Medieval copper production and the adjacent Ross Island copper mines (O'Brien and Comber 2008). Artefacts in Carrigagour Cave 1 also apparently entered the cave through an opening in the roof, suggesting that a settlement was once located somewhere overhead. The recovered material included whetstones, stone discs, hammerstones, jet bracelet fragments, two iron knives, an iron chisel, a nail, slag, animal bones and seashells (Ussher 1880; 1881b). It is likely that people living near Ross Island Cave and Carrigagour Cave 1 exploited the potential these caves offered as dry and cool enclosed spaces.

In limestone regions it is not uncommon to find souterrains constructed against cave entrances. Souterrains are, in essence, artificial caves (Ó Ríordáin 1968, 27). By taking advantage of natural subterranean passages and chambers, a much larger space was achieved for less investment of time and labour. Little research has been carried out into this particular type of souterrain and they have not been recognised as a distinct category (for example, Clinton 2001). An interesting cave-souterrain complex at Dunkerron, Co. Kerry was accessed from inside a stone hut located within a cashel. Human bones (now lost) were found on the cave floor in 1953, and in 1991 six further human bones were recovered during a survey of the site (O'Sullivan and Sheehan 1996, 179). These derived from an adult of undetermined sex that was radiocarbon dated to 1060 ± 40 BP (Beta-277381) (Fibiger forthcoming; Table 8.1). It is likely that originally a complete skeleton lay in the cave and may represent the hasty disposal or concealment of someone who had died as a result of conflict, illness or disease, or the remains of someone who died while being held hostage in the cave. It is intriguing to consider that the

cashel was occupied at the same time as a corpse was decomposing in the cave underneath. The skeleton may also, however, relate in some way to the final abandonment of the settlement.

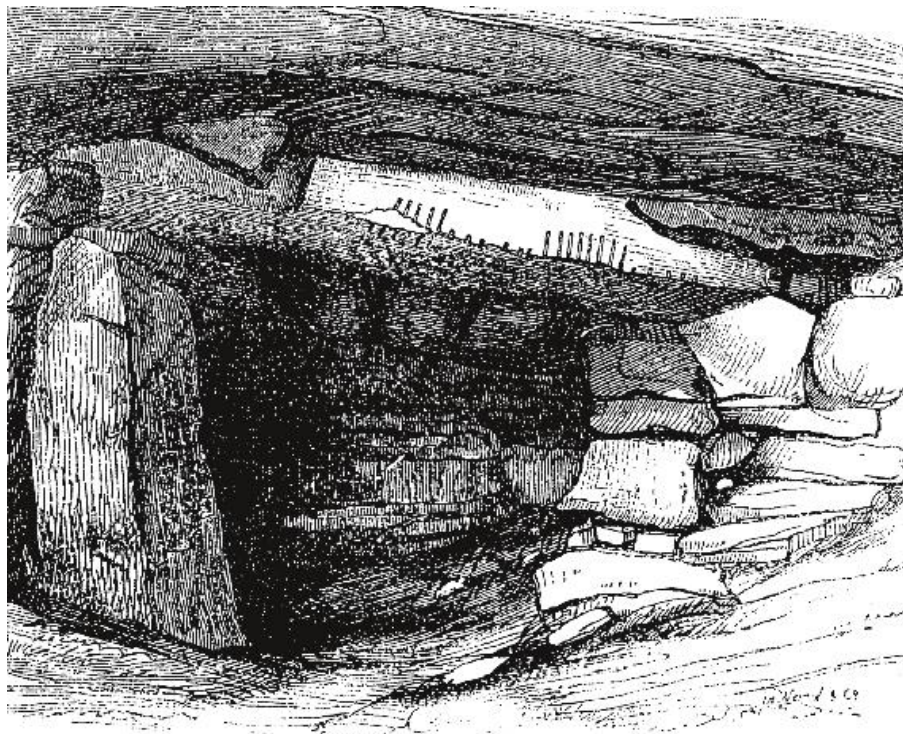


Figure 8.14 Souterrain and ogham inscriptions at the Cave of Crúachain, Co. Roscommon (Ferguson 1864/6)

The aforementioned cave-souterrain at Ballyegan also contained an intriguing assemblage of bones. A relatively complex souterrain with two passageways and two chambers had been constructed against the mouth of this small cave (Figure 8.13). The cave mouth, which could only be accessed via the artificial souterrain, had been blocked by the construction of a stone wall. The cave, therefore, may have functioned as a hidden secret chamber that could have been accessed in times of danger and the wall hastily built up to conceal those inside the natural cavern. In the artificial souterrain chamber directly north of the cave, an articulated horse skeleton was discovered that was interpreted as a ritual burial contemporaneous with the souterrain construction (Byrne 1991, 12). The discovery calls to mind the wider tradition of Viking horse burials (Sikora 2003/4), which may be significant in this instance considering the close proximity of Ballyegan to Cloghermore Cave where complex Viking ritual activities took place (see below).

A cave-souterrain complex of an altogether different nature is found

at Rathcroghan, Co. Roscommon. The Cave of Crúachain (or Oweynagat) seems to have been a ritually significant place during the Iron Age (see Chapter 7). In the latter part of the Early Medieval period, a souterrain was constructed against the cave mouth which involved the incorporation of two ogham stones of 5th century date (Figure 8.14) (Ferguson 1864/6; Condit and Moore 2003). One inscription reads VRAICCI MAQI MEDVVI – (*the stone*) of Fráech, son of Medb. According to sMedieval mythology, the warrior Fráech was son-in-law of Queen Medb and hero of the narrative *Táin Bó Fraích* which describes the wooing of Medb's daughter Finnabhair. There is, however, some suggestion that the Medb referred to in the ogham inscription is a male personage (Rhys 1898, 231). The inscription on the second stone is undecipherable, but a possible reconstruction is (MA) Q REGAS MU (COI) (Condit and Moore 2003; Waddell *et al.* 2009, 39–41).

It is highly unlikely that the souterrain at the Cave of Crúachain fulfilled any of the utilitarian functions usually attributed to these monuments because of the paucity of secular activities in the immediate environs and the special nature of the ogham stones. Ringforts and settlements at Rathcroghan deliberately avoided the nucleus of Iron Age ritual sites in which the cave is centrally located (Herity 1984, 135, 138). Ogham stones, while not uncommon finds within the fabric of souterrains, are extremely rare in Connaught and female names are almost entirely absent from the corpus of known inscriptions (Moore 1998, 23; Clinton 2001, 70; Moore 2010, 6). The possible reference to the goddess Medb in one of the stones from the souterrain at the Cave of Crúachain is highly significant, not only because she was the mythological queen of Rathcroghan, but also because of her link to the cave in one narrative (see Chapter 9). Reference to the warrior Fráech is similarly important in that the adjacent ritual landscape of Carnfree (*the cairn of Fráech*) derives its name from this mythical hero. Condit and Moore (2003) speculate that 'the builders of the entrance to Oweynagat may have been aware of the significance of the names in the inscription ... five centuries after it was carved ... This is entirely plausible since ogham was an essential part of every medieval poet's training'.

The elaborate structural enhancement of the Cave of Crúachain in the Early Medieval period may be a reflection of the regard in which it was held and its perceived association with the Otherworld into historic times. Early literary sources reveal that myths circulated linking the cave to supernatural creatures and omnipotent women and goddesses around the time that the souterrain was constructed (see Chapter 9). It is incongruous to believe that such a potent and feared place would have been adapted for domestic usage. Rather, the

souterrain may have served to define, contain, or separate the underground world and its beings from the outside world of the living. Perhaps the early historic souterrain fulfilled the same function as the late prehistoric enclosure: it may have acted to formally control access to and from the cave, by both the living and the dead (see Chapter 7). The incorporation of 'holy stones' may have served as some form of Christianisation of this supernatural place, or may indicate its perceived sanctity amongst Early Medieval communities. The Cave of Crúachain plausibly provides a parallel for the construction of souterrains within the fabric of older sacred sites, such as the Neolithic passage tombs at Knowth and Dowth which, to Early Medieval eyes, were probably perceived as caves.

HUMAN BONES OF EARLY MEDIEVAL DATE

An increasing number of caves have produced human bones that have been radiocarbon dated to the Early Medieval period (Table 8.1). Other potential sites are referred to in antiquarian publications but the relevant archaeological assemblages can no longer be located. For instance, during limestone quarrying at Cushendall, Co. Antrim in 1849 'the remains of about six skeletons had been discovered in what ... might have been originally a cave, the top and sides of which had fallen in through time; and that along with the skeletons were discovered two bronze axes, one stone axe, and two small silver coins' (Lloyd 1847/50, 395). Only the coins survive and these consist of Anglo-Saxon silver pennies struck between AD 830 and 870 (Hall 1973/4) which, if associated with the skeletons, tentatively suggest Viking burials.

The early manuscripts occasionally provide an explanation for the occurrence of human bones in caves. The Medieval *Annals of Loch Cé* for the year 1063 record: 'The cave of Alla, in Cera, was captured by the Connachtmen, against the people of Aedh Ua Conchobhair, in which one hundred and sixty persons were suffocated' (Hennessy 1871, 61). It has been suggested that this may be the Aille River Cave, Co. Mayo (Knox 1908, 42). No archaeological investigations have taken place there but were human remains of Early Medieval date discovered, these might substantiate the early literary accounts. Another example is an entry in the Medieval *Annals of the Fours Masters*: 'The Age of Christ, 1007. The sixth year of Brian. Muireadhach, a distinguished bishop, son of the brother of Ainmire Bocht, was suffocated in a cave, in Gaileanga of Corann' (O'Donovan 1851, 759). This may be a reference to the Kesh Caves, Co. Sligo and two pieces of evidence reflect activities at these caves in the later part of the period. A human tibia from Cave O, Kesh returned an Early Medieval date of 963 ± 33 BP (UBA-6680) (Table 8.1) while an iron

socketed armour-piercing projectile head of 10th–13th century date, possibly a crossbow bolt, was found in Coffey Cave some 65m to the north (Dowd 2013b). Is it possible that the human bone and projectile relate to the murdered distinguished bishop? It may seem fanciful, but as a possibility it cannot be entirely dismissed.

A human tooth from another cave in the Kesh complex, Plunkett Cave, is also of Early Medieval date (Table 8.1). It was one of four human teeth and a humerus fragment recovered from the site during excavations in 1901 (Scharff *et al.* 1903a). The occupation debris from this cave is described above. Was the tooth a natural loss related to someone who inhabited the cave? Or could it reflect a continuation of Iron Age practices that involved the ritual deposition of human and animal teeth at these caves (see Chapter 7)? The Plunkett Cave tooth dates to the earlier part of the Early Medieval period, a time when one might expect a stronger degree of continuity in pre-Christian beliefs and practices.

A mandible of an adult female from Robber's Den, Co. Clare has been radiocarbon dated to 1210 ± 40 BP (Beta-277382) (Table 8.1). This came from the second chamber of the cave which was partially excavated by cavers in 1963 (Mantle 1963) but never archaeologically investigated, and thus the nature of activities as represented by the mandible are not known. It is possible that Robber's Den was occupied during the Early Medieval period as quantities of animal bones have been recovered which may represent food debris and an Early Medieval comb fragment was found there by cavers in 2008. In fact, the cave was once described as 'an ideal place for a cave dweller' (Pick and Bartlett 1936, 66). Is it possible that the inhabitant of the cave died there and her remains were never removed for burial elsewhere? Perhaps the bone represents a clandestine burial or a victim of a violent death?

As is the case with many of the prehistoric human bones from caves, Early Medieval remains are often difficult to interpret and this is exemplified by material from the Catacombs Cave, Co. Clare (Figure 8.15). Here, the skull of an adult male and an ulna fragment – both of Early Medieval date – formed part of a small multi-period assemblage of human bones recovered during antiquarian excavations (Table 8.1). The skull was found in a cavity or depression with other human bones resting on top of it and two iron knives nearby (Scharff *et al.* 1906, 9). Approximately 11m from the skull a decorated bronze strap-end and buckle, an insular example dating to AD 850–950, was found in a recess 'deep below the surface' (Figure 8.16) (Scharff *et al.* 1906, 12; Ragnhalla Ó Floinn pers. comm.). While there are various Early Medieval elements in the Catacombs assemblage, it is difficult to establish what material, if any, is related. The two dated human bones

may derive from the same individual, but the radiocarbon determinations suggest the possibility of different individuals and two separate events. Do these bones reflect complete skeletons that were disturbed and dispersed, or the introduction of disarticulated remains? Do they represent burials, or perhaps corpses that were dumped in the cave? The buckle was a valuable piece that would have been owned by an individual of status. Was it worn by the man whose bones occurred in the cave? Or does it relate to an entirely separate event? It may, for instance, have been hidden but subsequently never retrieved. Taken together, do the bones, knives and buckle represent some form of conflict or violent encounter? Was someone hiding in the cave and died there? At sites like the Catacombs, the nature of Early Medieval activities continues to be the subject of speculation until further excavation takes place.

If we were to consider only the physical evidence and disregard the fact that Christianity was widespread in Early Medieval Ireland, the patterning of small quantities of disarticulated human bones in caves shows remarkable continuity from prehistoric into historic times. For instance, in terms of human remains the prehistoric and Early Medieval evidence from the Catacombs is quite similar, and this is also the case at Robber's Den. With growing evidence for non-Christian funerary rites and variability in Early Medieval burial (O'Brien 1992; Leigh-Fry 1999; Corlett and Potterton 2010), should we not be open to the possibility that a degree of circulation and deliberate deposition of human bones in caves occurred? This is especially compelling when considered in the light of the long-standing associations between saints and caves, and the religious importance of many cave sites in the past and present.

CAVES: PLACES OF VIKING BURIAL?

Dunmore Cave and Cloghermore Cave have both produced extensive quantities of human bones and assemblages of Viking artefacts (Drew and Huddart 1980; Dowd, Lynch and McCarthy 2007; Connolly, Coyne and Lynch 2005). Both consist of large subterranean systems with virtually no evidence that they had been used prior, or subsequent, to the Early Medieval period. Dunmore Cave has been linked to the Vikings since Medieval times when early literary sources record a Viking attack at a place known as *Derc Ferna* which is generally accepted to be an older name for the cave – it was known as such by people in the locality during the 19th century (Foot 1870/1, 66; Praeger 1918, 149). According to the *Annals of the Four Masters*, in the year AD 930 (corrected), 'Godfrey, grandson of Imhar, with the foreigners of Ath Cliath, demolished and plundered Derc Ferna, where one thousand persons were killed' (Foot 1870/1, 67). The *Annals of*

Inisfallen record for the same year that 'A naval encampment [made] by the foreigners of Luimnech at Loch Bethrach in Osraige, and Derc Ferna in Osraige was ravaged by them' (Mac Airt 1988, 151).

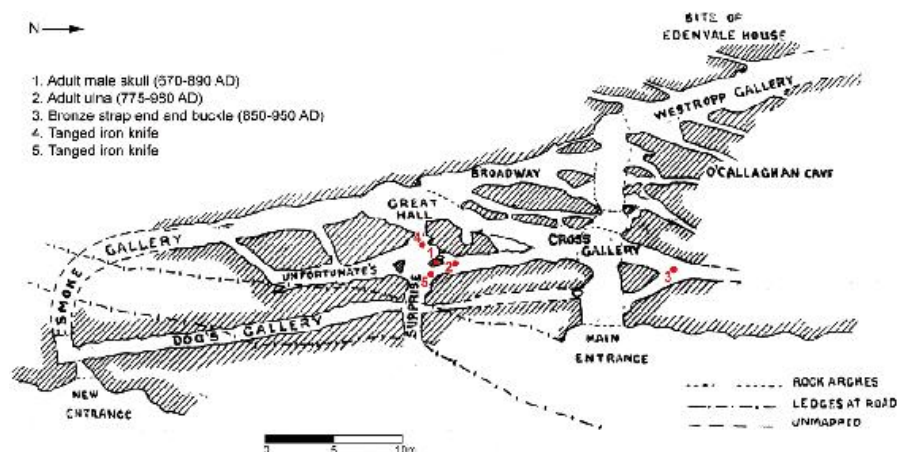
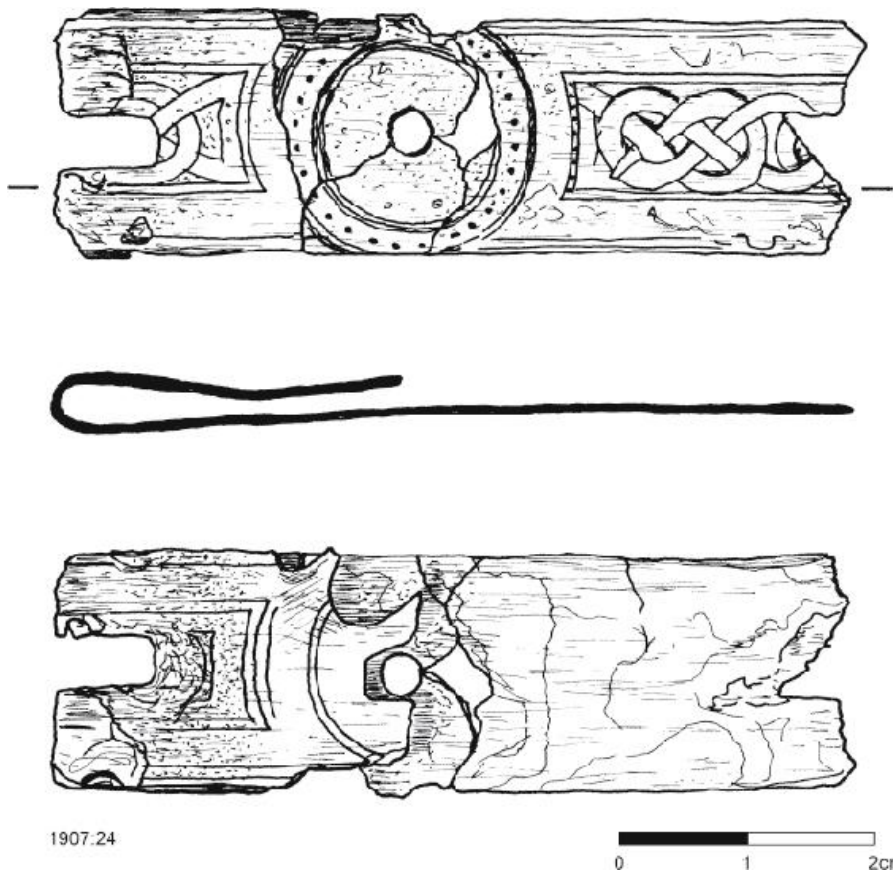


Figure 8.15 The Catacombs, Co. Clare with locations of known Early Medieval material (adapted from Scharff et al. 1906)



1907.24



Figure 8.16 Bronze strap-end from the Catacombs (Illustration Malgorzata Kryczka)



Figure 8.17 Viking coins (41-9-1983) from Dunmore Cave, Co. Kilkenny
(Photo NMI)



Figure 8.18 Viking beads (04E1517:06-11) from Dunmore Cave (Photo
Thorsten Kahlert)

Human bones have been retrieved from Dunmore Cave over a period of 300 years but the vast majority are now lost, including an assemblage representing 45 individuals that was recovered in 1973 (Drew and Huddart 1980). Fewer than 2600 human bones from the site can be located at present. In her analysis of this material, Lynch (forthcoming) identified 20 adults: six female, five male and nine of undetermined sex; and 29 juveniles: three perinates (aged 24 gestational weeks *in utero* – 7 days post-natal), seven infants (0–1 yr old), 15 young children (1–6 yrs old), three older children (7–12 yrs old), and one adolescent (13–17 yrs old). The perinates suggest the presence of pregnant women or women who died in childbirth, though some may represent stillbirths or infants who died soon after birth. The overall MNI for the site is 49 but it is important to stress that this is only a fraction of the original assemblage (*ibid.*). Adolescents are largely absent as are elderly individuals.

Seven human bones from different parts of Dunmore Cave returned Early Medieval dates and there is some suggestion of two distinct periods of activity: a late 8th to late 10th horizon, and a late 9th to early 11th century phase (Table 8.1). Considering the mean dates in each cluster, the human remains hint at activities concentrated in the mid to late 9th century and the mid 10th century. The later dates correspond with a series of artefacts including a Viking coin hoard

dated to *circa* AD 930 (Figure 8.17), a second Viking mixed hoard of AD 960 date, a polyhedral-headed ringed pin of 10th century date, and eight gold foil covered glass beads dating to *circa* AD 950–980 (Dowd *et al.* 2007).

Traditionally, the human bones from Dunmore Cave have been interpreted as members of a local Gaelic population that were massacred during the Viking attack that is recorded in the annals (Foot 1870/1, 88; Drew and Huddart 1980, 19). This hypothesis, however, does not stand up to scrutiny. There are no signs of trauma or violence on any of the surviving bones and no trauma was noted in the 1973 assemblage (*ibid.*, 22; Lynch forthcoming). The vast size of the cave and the absence of evidence for intense fires at the entrance preclude the possibility that people were smothered to death. Further, the artefacts recovered in no way reflect a local Gaelic population.

The Viking association with Dunmore Cave is undeniable: over 100 artefacts have been recovered, almost all of which are distinctly Viking in character. The majority consist of items of personal ornamentation – glass beads, ringed pins, bone pins, lignite bracelets – which were probably worn by the individuals whose skeletal remains were found at the site (Figure 8.18). This implies a population of Scandinavian origin. It is quite plausible, therefore, that Dunmore Cave was a Viking burial ground (Connolly *et al.* 2005, 42; Dowd *et al.* 2007, 15). In support of this, two bobbin-shaped wooden objects found in the cave appear to have parallels in Scandinavian burial contexts (Fanning 1994, 17; Sheehan forthcoming). Further, the demographic spread – a large proportion of infants and young children in addition to the presence of both female and male adults – is what might be expected in a community cemetery. Without doubt the Viking burial hypothesis is open to criticism, but at present a more convincing interpretation has not been put forward.

There are similarities in the archaeological record from Dunmore Cave and Cloghermore Cave, but at Cloghermore more complex rituals took place and there was a wider range of artefacts including weapons, domestic objects and craft production equipment, as well as cremated and unburnt human remains (Connolly *et al.* 2005). The human bones represented at least 15 adults: seven female, five male and three of undetermined sex; and 15 juveniles: four infants (0–1 yr old), seven young children (1–6 yrs old) and four older children (6–12 yrs old). Similar to Dunmore, no adolescents and only one elderly individual were identified. With the exception of one articulated burial, all the individuals from Cloghermore Cave were represented by disarticulated bones. Radiocarbon dates span the mid 7th to the late 10th century (Table 8.1), but there may have been just two principal periods of activity (*ibid.*, 171). During the earlier phase, probably

centred on the 8th century, it was suggested that the cave was used by a local 'pagan' Gaelic family as a burial vault or ossuary for the disposal of the unburnt remains of at least three adults and four children. One of the adults had died by violent means, possibly by sword or axe. Disarticulated bones and dismembered body parts representing 15 further individuals may have been placed in the cave at this time. No artefacts or faunal remains are clearly associated with this horizon (*ibid.*).

At a later stage, Cloghermore Cave appears to have been utilised by a Viking group for the deposition of the remains of at least three adults (two male, one female) and three juveniles. Substantial modifications were made to the cave at this time (Connolly *et al.* 2005). A large D-shaped, double-banked enclosure was constructed on the ground surface surrounding the opening into the cave. It enclosed an area 16.8m × 28m inside which wooden structures and a possible cremation pyre were built. The vertical descending passage into the cave was widened and drystone walling was constructed to create a more elaborate and formal entrance feature. This shaft was deliberately sealed after the final use of the cave. An extended articulated inhumation of an adult male (30–40 yrs old) was placed in the cave just below the entrance. The head had been wrenched from the corpse when it was in a state of decay but still fleshed (Lynch 2005). Associated with this individual were copper alloy pins, an iron knife, a stone vessel or crucible, a ringed pin, a whetstone and a shield boss. Based on dates from associated features, this seems to be a Viking interment of late 9th or early 10th century date. In another part of the cave a sub-rectangular pit contained the skeletal remains of four individuals including the torso of a child, foot bones of two other children, and foot bones of an adult. Interspersed with the remains were iron knives, bone combs, a bone point, a bone pin, a spindle whorl, a decorated gaming piece and a large quantity of animal bones – primarily young sheep, cattle and pig (Connolly *et al.* 2005).

The evidence from Cloghermore Cave is unusual in terms of what is known of burial and ritual in Early Medieval Ireland but, as mentioned above, non-Christian rites and practices may have been more prevalent at this time than is currently accepted. Several of the radiocarbon determinations pre-date Viking activities in Ireland and thus must reflect Gaelic practices. The cave may have been an occasional place of interment for those who for some reason did not warrant burial in a Christian cemetery, perhaps because of their social status, religious beliefs, or the manner in which they had died. If the cave was recognised as a burial (or disposal) place for people who were somehow 'other' in the community, a Viking group may have deemed it a suitable site in which to conduct their own funerary

rituals. During that phase of use the cave was a significant religious site, one that had a marked aboveground register in the form of the D-shaped enclosure.

An important point of comparison between Dunmore and Cloghermore is that Viking hoards were recovered from both sites. At Dunmore Cave ten coins and coin fragments were discovered scattered through different strata in a small depression in the Market Cross Chamber (Figure 8.17). The coins were deposited *circa* AD 930 which correlates with the date of the supposed Viking attack on *Derc Ferna* (Drew and Huddart 1980; Bornholdt Collins 2010, 19). The second hoard, deposited *circa* AD 965, was found in a rock crevice in the Town Hall Chamber. It had originally been wrapped in a sumptuous garment, at least part silk, complete with 16 silver woven wire buttons, a glass bead and a leather belt with a copper-alloy buckle and strap ends. The hoard comprised 14 or 15 Anglo-Saxon coins and coin fragments, a silver penannular arm-ring, a silver brooch pin fragment, a silver rod, three silver ingot fragments, a silver discoidal ingot and two copper-alloy ingots (Bornholdt Collins 2010, 25–8). The hoard ‘exudes wealth’ and has been interpreted as the possession of a male traveller from, or with close connections to, the Irish Sea area (*ibid.*, 38). At Cloghermore Cave a small hoard was found in a rock cleft and consisted of two silver ingots and four large hack-silver fragments of arm-rings, two of which were tightly wrapped together (Figure 8.19) (Sheehan 2005).



Figure 8.19 Viking hoard from Cloghermore Cave, Co. Kerry. Two arm-ring fragments (09E0431:66, 73); two ingots (09E0431:61, 74); interlocked fragments of two different arm-rings (09E0431:72:1, 2)

Analysis of Viking hoards from Ireland has tended to concentrate on discussions of structure, classification, chronology and distribution and they have been interpreted almost exclusively as economic property that was lost or was concealed with the aim of subsequent retrieval, or as social gifts of symbolic importance (Edwards 1990, 176; Metcalf 1992, 103; Ó Cróinín 1995, 262; Sheehan 1998a, 157–60; 1998b, 175–6; 2000, 31–2; Ó Floinn 1998, 155–9; Maher and Sheehan 2000, 178–9). It has been suggested, for example, that the coin hoard from Dunmore Cave was lost by someone exploring underground (Drew and Huddart 1980, 19), and that the Cloghermore hoard was ‘a standard deposit, deliberately concealed with the intention of recovery. Whether it was deposited as an emergency hoard or as a savings hoard is impossible to judge, and it may even have served both roles’ (Sheehan 2005, 152). The possibility that some Viking hoards were deposited as votive or funerary acts is not generally given serious consideration, yet in the context of the abundant human remains and burials from Dunmore and Cloghermore this seems to be a far more probable scenario. Perhaps historians and archaeologists are too quick to interpret all Viking hoards as secular. It remains a matter of debate as to whether the Dunmore and Cloghermore hoards represent the concealment of wealth, the possessions of deceased individuals that had been placed in the caves, a form of collective gravegood, or votive offerings. At the very least, these hoards reveal that some Early Medieval people, and specifically Vikings, were intimately familiar with the micro-landscapes of particular caves, and these dark places resonated with symbolic significance.

THE END OF AN ERA

The Early Medieval period stands out in the collective archaeological assemblages from Irish caves for several reasons. Firstly, it is the most visible of all periods in that substantial quantities of Early Medieval artefacts have been recovered from caves, typical of the material that occurs on ringforts, crannógs and monastic settlements. This indicates a marked increase in the appropriation of caves and, though further radiocarbon dates are required, this was particularly the case from the 8th century onwards. Secondly, the evidence reveals that caves were used to fulfil a wider variety of functions than in prehistoric periods. Caves across the Early Medieval landscape were transformed into homes, they were used for shelter and storage, and became convenient places for hiding wealth. The veneration of certain caves as sacred

places seems to have continued and they were occasionally used for burial. The broad diversity of activities is not apparent in the archaeological assemblages from any other period – either before or after. The most revealing aspect of the Early Medieval material is that it seems to indicate a significant shift in how caves were perceived. No longer were caves connected exclusively with ritual and religion, an association that had dominated for millennia. It seems that as the adoption of Christianity became more widespread, caves lost some of their mystique and came to be increasingly regarded as convenient spaces that could be utilised for a variety of different secular functions. Strange, then, that this trend did not prevail into Medieval and later times.

Chapter 9

Silent Spaces or Speaking Volumes? the Medieval Period (AD 1169–1550)

Wogan Cave on the coast of south-west Wales is a large natural cavern that penetrates the north-eastern face of a limestone promontory. Three sides of the promontory are defined by what would have been a tidal river that flowed into the Irish Sea. The cave has a long history of use with finds including Mesolithic lithics and a hoard of Roman coins. During the first decade of the 13th century Wogan Cave was incorporated into the defences of a castle that had been constructed on the promontory overhead. A large watergate lit by several loops and an ornate window was built across the cave mouth; a doorway allowed access by boat between the cavern and the tidal river. At this time the cave probably functioned as a convenient place for unloading and loading supplies brought to and from the castle by river. An enclosed stone spiral staircase leads from the cave interior up the cliff face of the promontory into the ground floor of the great hall of Pembroke Castle situated overhead (King 1978; Jones 1998). This fortification, founded in 1093 by Arnulf de Montgomery, was to become the most powerful Norman stronghold in Wales. It was from here that Richard de Clare – known as Strongbow to the Irish – launched his military expedition to Ireland in 1169, possibly sailing out from Wogan Cave. Within a short period of time he had become Lord of Leinster. From this point onwards the nature of Ireland's relationship with Britain served to influence, and in some cases define, the political, cultural and social landscape of Ireland.

From the arrival of the Anglo-Normans until the late 1600s, Irish history was punctuated by conflict and religious wars, often associated with the dispossession of Gaelic lands by immigrant settlers. This was a result of the aggressive expansion of the English state, in particular the 16th and 17th century plantations which were state-organised schemes of large-scale colonisation. As a consequence of the dramatic demographic changes, people were forced to adapt to new circumstances and new landscapes. It is estimated that approximately 95% of the Medieval population were rurally based (O'Connor 1998,

xi), yet there were various different ways in which people engaged with their surroundings. The interaction between a Gaelic lord and his lands, for instance, would have differed greatly from the experiences of an immigrant settler or a tenant farmer. It is within this context that we must explore the manner in which caves were used and perceived. The archaeological and mythological evidence tells two strikingly different narratives (Figure 9.1). The distinct paucity of Medieval archaeological material from caves might lead to the conclusion that they had become redundant features in the landscape by the 12th century. The annals, poetry and literature however, which are the primary sources of information for Gaelic Ireland, reveal an altogether different picture. The mythology indicates that for the Gaelic-Irish population certain caves figured prominently as supernatural places. Caves were at times perceived as locations of both the Christian and non-Christian Other-worlds and there appears to have been a general reluctance to venture underground. As we will see later in this chapter, where the archaeological record is silent, the mythology speaks volumes.

FROM CAVE TO CASTLE

Wogan Cave is unlikely to have been a major deciding factor in where to construct Pembroke Castle, but it may have been viewed as a fortuitous bonus and one that was readily exploited. Several similar examples exist in Ireland of associations between castles and caves; the latter were probably used in an opportunistic manner for activities such as storage, accommodation for workers, as animal pens or places to detain prisoners (Dowd 2014).

In the late 18th century Seward (1795) described the use of a cave associated with Strancally towerhouse, Co. Waterford. The castle was constructed on a rock outcrop and a cave reputedly provided access from the castle to the edge of the Blackwater River. This subterranean passage appears to have been part natural and part rock-cut. Tradition at the time recorded that the Earls of Desmond had used the cave as a prison. Enemies were invited to the castle ‘to make merry, and afterwards confined to this dungeon, where they suffered them to perish’ (*ibid.*, n. p.). Apparently bodies were subsequently thrown into the river and the castle and cave were later demolished by cannon.

Dunluce Castle on the Antrim coast is perched upon a steep basalt precipice that is pierced by a sea cave known as Mermaid’s Cave. The castle was probably built between 1490 and 1513 by the MacQuillans; it witnessed extensive refurbishments when taken by the MacDonnells in the mid-16th century, and was continuously occupied until the 1680s (Breen 2012, 49, 72). In the 1830s Colton (1835, 73) observed with regard to the cave that because of ‘access to the ocean from the

castle ... An army could march through it, to embark or re-embark, with all necessary ammunition – with artillery even'. In reality the cave could not have functioned as a landing place, but small boats can be rowed in when the sea is calm (Breen 2012, 4, 132). Recent archaeological excavations at another site on the Antrim coast, Dunseverick Cave, revealed that it and the adjacent Dunseverick Castle were used contemporaneously. Defined strata in the cave contained animal bones, seashells, iron fragments, worked wood and over 900 sherds of pottery. A substantial wall had been constructed across the cave mouth (Logue 2008). How exactly the cave was used is not clear and the pottery suggests primarily an Early Medieval date for activities, but some Ulster Coarse Ware sherds indicate a Medieval phase. The latter may relate to activities in the castle some 80m distant, such as providing shelter for labourers. Prior to the 2007 and 2008 excavations in Dunseverick Cave the site was not known to be of archaeological significance but was targeted for investigations because of its proximity to the castle and the likelihood that it would have been utilised. This is excellent example of the value of informed and targeted research excavations at caves that are currently not listed as archaeological sites.

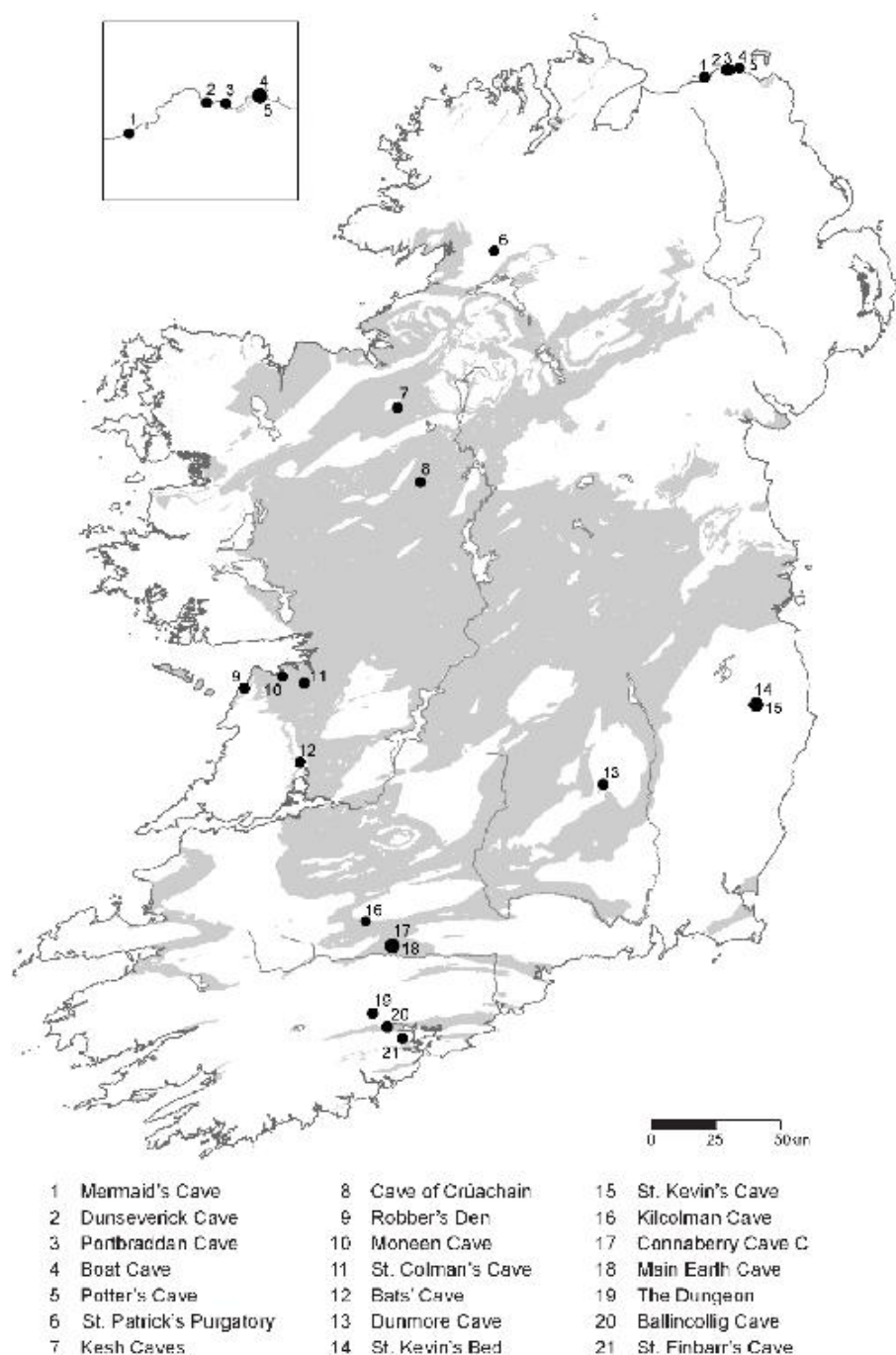


Figure 9.1 Caves of significance in Medieval Ireland

Three natural caves in Co. Cork were also potentially used by occupants of adjacent castles. The towerhouse at Blarney was constructed *circa* 1480 by Cormac Láidir MacCarthy (Power *et al.*

1997, 360). It is perched on a limestone outcrop and a cave penetrates the northern side of the knoll. Presently known as ‘the dungeon’, it consists of a long low natural passage. The late 16th and early 17th centuries saw the construction of a fortified manor house at Blarney along with gun turrets, one of which surrounded the cave entrance. This turret was a D-shaped structure with gun loops on each of the two floors (Lyttleton 2011, 101, 106–7). The cave is accessed from the ground floor of the turret and extends for over 17m, terminating under the towerhouse. The outermost 3.5m of cave passage were artificially heightened and widened by rock cutting indicating that it must have served a particular function, perhaps for storage. In this instance the presence of a cave probably influenced the precise location of the gun turret (Figure 9.2).



Figure 9.2 The Dungeon at Blarney Castle, Co. Cork (Photo Blarney Castle Estate)

Less than 6km south of Blarney, Ballincollig towerhouse and its imposing bawn were also built on a steep-sided limestone outcrop. This was a castle of the Barrett clan and was constructed in the 15th century (Power *et al.* 1997, 356–7). A cave 9m in length exists in the north-eastern section of the knoll (Figure 9.3). Collapse from part of the castle bawn partially blocks the entrance. A 19th century tradition claimed that the Barretts kept their prisoners in the cave (Coyne and

Bartlett 1842, 61). In the early 1930s at least 30 oyster shells, animal bones and a fragment of iron were noted on the surface of the cave floor (Dowd 2014). The date of this material is not known but it may reflect Medieval activities. A similar relationship existed at Kilcolman Castle in north Cork. This towerhouse, again a 15th century construct, was acquired by the Earl of Desmond from the Barrys in 1430 and was granted to the poet Edmund Spenser in 1590 (Power *et al.* 2000, 535–6). A cave occurs in the north-western corner of the limestone crag on which the towerhouse stands. In folk tradition Spenser and his family used the cave as an escape route from the castle when it was captured in 1598 (Grove White 1913, 273). This is one of the most enduring themes in Irish folk tradition: that an underground passage leads from a castle to another location or building, often many kilometres distant. While nothing appears to have been discovered in Kilcolman Cave during investigations by R. J. Ussher in 1904, it is large enough to have been useful (9m long × 6m wide × 3m high) and may repay excavation in the future (Coleman 1965, 73).

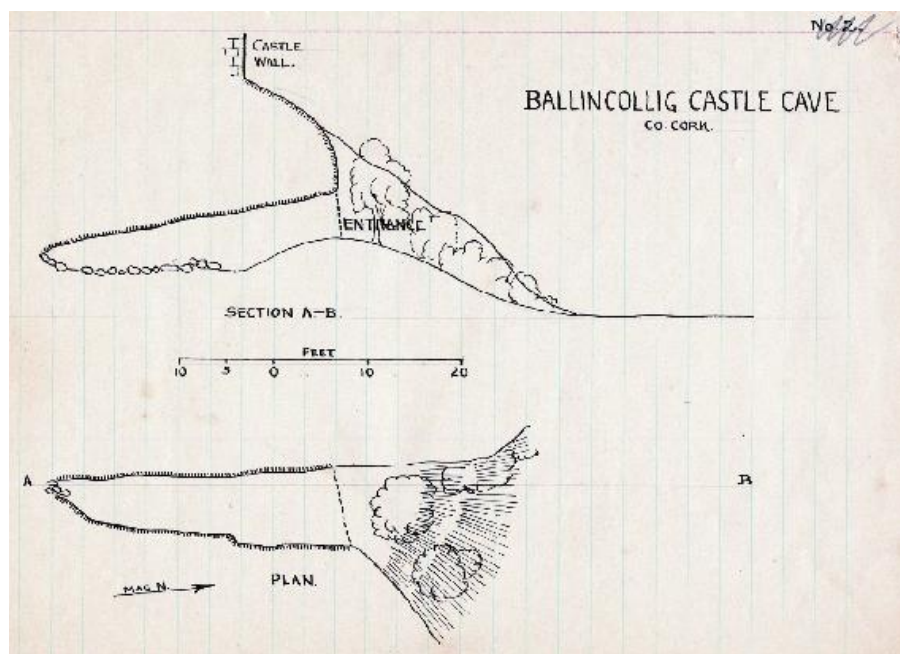


Figure 9.3 Sketch of Ballincollig Castle Cave, Co. Cork by J. C. Coleman, early 1930s (Courtesy of the SUI)

HUMAN BONES OF MEDIEVAL DATE

The almost complete absence of Medieval artefacts from caves is juxtaposed by a small but intriguing collection of human bones of

Medieval (or possibly post-Medieval) date from five sites in counties Cork and Clare (Table 9.1). None of these caves produced recognisable contemporaneous material. The bones have been examined by Fibiger (forthcoming). A child radius from the Catacombs dates to between the mid-12th and mid-13th century. An adult vertebra from Connaberry Cave C reflects activities in the 15th century. An adult tibia from Robber's Den, an adolescent tibia from Bats' Cave, and an adult tibia from Main Earth Cave have a wide date range spanning the 15th to 17th centuries.

Site	Material	$\delta^{13}C$	Lab code	Measured radiocarbon years (BF)	Calibrated radiocarbon date (2 σ) AD
Clare, Bats' Cave (M. Dewe)	Human, Adolescent, L tibia	-22.8	Beta-277395	270 $\pm$ 40	1486–1676 (85%) 1777–1800 (8%)
Clare, the Catacombs (M. Dewe)	Human, Child (< 3 yrs) L radius	-23.3	UBA-8149	853 $\pm$ 24	1134–1235 (93%)
Clare, Moncen Cave (Dowd 2013a)	Human, Adolescent male 1st I, metatarsal	-21.01	UBA-19933	265 $\pm$ 24	1522–1574 (26%) 1627–1669 (62%) 1781–1759 (8%)
Clare, Robber's Den (M. Dewe)	Human, Adult R tibia	-19.6	Beta-277383	320 $\pm$ 40	1458–1649
Cork, Connaberry Cave C (M. Dewe)	Human, Adult cervical vertebrae	-20.4	Beta-277399	470 $\pm$ 40	1395–1489
Cork, Main Earth Cave (M. Dewe)	Human, Adult R tibia	-22.1	UBA-6678	306 $\pm$ 32	1484–1653

Table 9.1 Medieval radiocarbon dates from caves

The child from the Catacombs was less than three years old at the time of death and was represented by five bones. The presence of different anatomical regions suggests that a complete corpse was originally present in the cave but was subsequently disturbed and dispersed. Was this a formal burial outside of consecrated ground similar to those found at *ceallúnaigh* (children's burial grounds)? Did the child meet with an untimely death in the cave, or in Edenvale Lake located just outside the entrance? Could the bones represent the hasty disposal of a child who had died through violent means or due to illness or disease? No signs of violence or pathologies were noted on the remains (Fibiger forthcoming), but this does not preclude any of the above possibilities. Bats' Cave, Main Earth Cave and Connaberry Cave C were all excavated in the early 20th century but nothing resembling a complete skeleton was recovered in any instance. In the absence of any taphonomic factors or cultural behaviour that might explain such partial remains in a historic context, it is plausible that some if not all of the human bones are in a secondary position. They may have been brought into the caves by scavengers such as wolves or foxes from nearby graveyards or scenes of violence.

A feature of four of the five caves is that they are all located within

1km of a Medieval building suggesting that the human bones may in some way relate to these centres of activity. The Catacombs lies 600m north of the ruins of a Medieval castle at Edenvale, while Bats' Cave (1km south-east of the Catacombs) is less than 450m north of an Augustinian nunnery and associated graveyard and holy well at Killone (Figure 5.19). The human bone from Bats' Cave may have been placed there by someone journeying to or from the Augustinian foundation: the path leading to the nunnery passes beneath the cave and is known as the *Pilgrim's Road*. Main Earth Cave and Connaberry Cave C are located approximately 400m and 200m from Castlewidenham towerhouse respectively. All three sites lie on the eastern side of the Awbeg River. The castle was almost certainly occupied when the bones entered the caves and the three sites may be loosely connected. For instance, the bone from Main Earth Cave could conceivably relate to an attack on the towerhouse by Cromwellian forces in 1649, perhaps representing a victim of the battle. The human tibia from Robber's Den is more enigmatic. It was one of two bones found in the deepest chamber of the cave together with a skeleton of late prehistoric date. There are no identifiable Medieval sites in the immediate environs of Robber's Den. In this instance, as is so often the case with caves, only further excavation and radiocarbon dating can shed light on this unusual find.

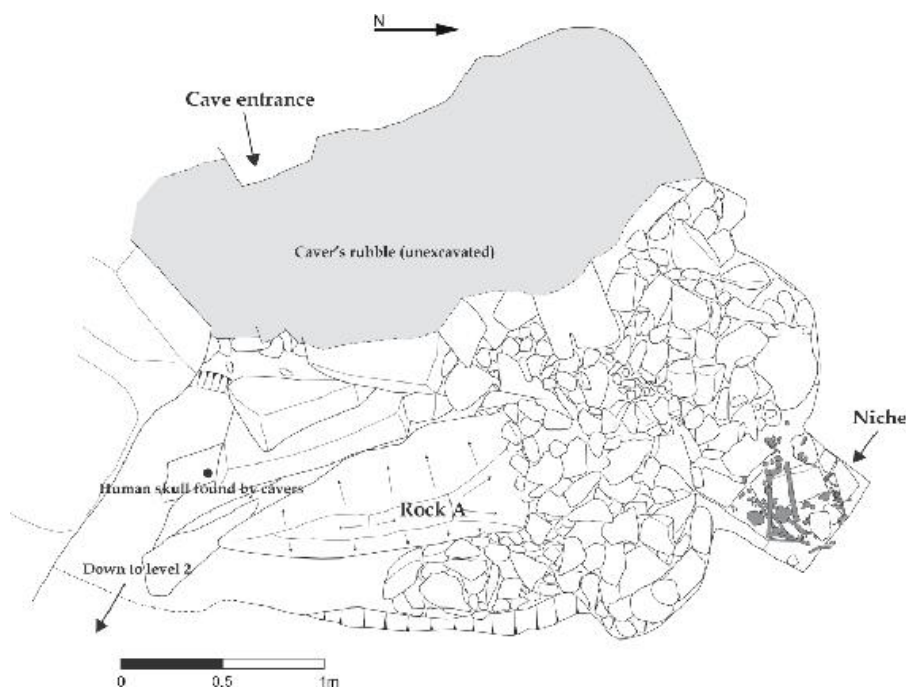


Figure 9.4 Moneen Cave, Co. Clare with location of skeleton and skull

Complete skeletons – of any date – are rarely discovered in Irish caves, not least because of disturbance to stratification. One notable find, however, is a late Medieval skeleton from Moneen Cave, Co. Clare (Dowd 2013a). An artificial niche cut into the cave wall (Figure 9.4) contained the skeletal remains of an adolescent boy aged 14–16 years at the time of death. The skull had been removed during decomposition and carried into the chamber, presumably by scavenging animals. Osteoarchaeological analysis indicated that the boy had suffered malnutrition and some bones displayed stunted growth. The discovery is enigmatic and a number of possible explanations must be considered. He may have been using the cave for short-term shelter, perhaps associated with specialised upland activities such as booleying. Was this the hasty disposal of someone who died by violent means or was diseased? Perhaps it was a clandestine burial outside of consecrated ground? One final theory is that this young person, possibly ill or injured, died while seeking refuge in the cave.

HOW MANY POTS MAKE A HOME?

Medieval Gaelic-Irish settlement was ‘overwhelmingly rural’ and dispersed in nature. It embraced an economy that was largely pastoral with transhumance forming a notable aspect of farming practice (O’Conor 1998, 109; O’Keeffe 2000, 80). There is ample evidence that Early Medieval settlement sites continued to be occupied, or were re-occupied, by the Gaelic-Irish including crannógs and natural islands, cashels, ringforts, promontory forts and hillforts (O’Conor 1998; O’Sullivan 1998; Fredengren 2002). The same level of continuity is not readily apparent in the archaeological record from caves, places that were often used for habitation in Early Medieval times. There is also no evidence that caves were occupied in the course of transhumance or by those whose lifestyles involved a degree of mobility. This is surprising given that living conditions in many caves would have been comparable, if not superior, to occupation in some of the flimsy types of houses that were used by the poorest people in Medieval society, such as the *creat*. These small, one-roomed, windowless houses of post-and-wattle construction could be easily dismantled and rebuilt and so were associated with booleying, often in marginal inhospitable land (O’Conor 1998, 95–6; 2002).

It could be argued that Medieval cave occupation, as with other periods, has not left any discernible trace. The absence of identifiable food debris, floors, structures and hearths may simply reflect a lack of

radiocarbon dating. Though small quantities of Medieval pottery (Everted Rim Ware and glazed sherds) have been recovered from a series of caves along the Antrim coast – Potter’s Cave, Boat Cave and Portbraddan Cave (Kyle forthcoming; May 1943, 54) – in itself the material is insufficient to convincingly argue for substantial occupation (though further excavations may refute this interpretation). Rather, the material suggests short-term shelter, refuge, or the disposal of domestic debris. In contrast, caves that were occupied in Medieval Crimea have produced substantial remains including pottery, tiles, waterpipes, glass, bone and metal artefacts, hearths, floors, and large rubbish pits. Some caves were enlarged and others contained features such as stone steps, seats and walls (Burov 1997, 133). That said, the differences between Ireland and Crimea may simply reflect differences in the duration of occupation (considering the degree of mobility in Medieval Gaelic society) rather than distinguishing between occupied and unoccupied caves.

RETREATS OF HOLY MEN

In the spirit of St. Anthony and St. Paul, the early Desert Fathers who retreated to caves in Egypt, Medieval Christian hermits may also have sought solitude in small caves located in inhospitable and isolated parts of the Irish landscape. The evidence survives in the form of early literary references and the folk traditions of recent centuries. There is no supporting archaeological evidence but then none of the relevant cave sites have ever been excavated. These associations may also reflect a deliberate attempt by the church to develop the cult of a saint centuries after his death by linking him to a particular topographical feature and place within an ecclesiastical complex.

A 13th century document, the *Dublin Rule*, described that anchorites live ‘in the desert, some in caves, some having been enclosed beside the church, separated from all, having cast behind all worldly things, holding their hearts raised up to God’ (Ó Clabaigh 2010, 158). The Ecclesiastical Taxation of 1302–6 makes reference to *Ecclesia de Antro Sancti Brandani* (The church of the cave of St. Brendan) at Ballymacelligot, Co. Kerry. Though the site seems to have been destroyed in the 19th century, it was known in local tradition as *Uaimh Brénainn* (the cave of Brendan) and a Medieval convent and church were reputedly once located there (Hickson 1883/4, 302). The naming of the cave was explained in a narrative contained in the *Lives of St. Brendan* which dates to at least the 12th century. It relates that Bishop Erc ordered Brendan to spend a night in the cave as penance for sins committed (Manning 2005, 110). In 1137 an Augustinian monastery was constructed on the site of the cave that had been the retreat of St. Finbarr in Cork city (Ó Riain 1994, 25–6). In 1306 a

Cork merchant bequeathed in his will 40 pence to ‘the male anchorite of St. Finbarr’s Cave’ (Ó Clabaigh 2010, 165). Writing in 1644, French aristocrat François de la Boullaye-Le Gouz stated that St. Finbarr’s Cave ‘extends far underground’ and noted that in former times St. Patrick had retired there to pray (Crofton Croker 1837, 29).

In support of these few literary references, 19th and 20th century folk tradition is replete with accounts of holy men who occupied caves. These caverns were usually components of Medieval ecclesiastical complexes, some of which were visited as part of religious pilgrimages in post-Medieval and modern times. St. Colman’s Cave forms part of the ecclesiastical complex at Keelhilla, Co. Clare which includes a 12th century church (Figure 9.5). On Cape Clear Island, Co. Cork a cave dedicated to St. Ciarán was reputedly located beside a Medieval church associated with the same saint (Seward 1795). The cave is no longer visible. The late Medieval *Life of St. Kevin* described Glendalough, Co. Wicklow as one of the four major places of pilgrimage (Harbison and Lynam 2002, 32). The founder of the monastery, St. Kevin, reputedly spent a number of years as a recluse in at least two caves there – St. Kevin’s Cave and St. Kevin’s Bed (Figure 9.6). The latter consists of a small chamber (probably a prehistoric mine) located on a sheer cliff face almost 10m above a lake. It can only be accessed by boat (Hemp 1937, 290; Manning 2005, 110). Having been tempted by a beautiful woman, St. Kevin resolved to devote his time ‘on his knees in the interior of his cave, condemning himself to undergo the severest penance’ (Arlincourt 1844, 168). The woman in question came to the cave but slipped and fell – or in most versions was thrown – into the lake (Coyne and Bartlett 1842, 175–6; Harbison and Lynam 2002, 33). St. Kevin’s Bed was later used by St. Laurence O’Toole, a 12th century abbot at Glendalough. The contemporaneous Latin *Vita* of the saint records that he regularly spent 40-day retreats in the cave, even after he became archbishop of Dublin in 1162. A wooden ladder allowed him to access the cave from the lake (Manning 2005, 110–3).

Several of the caves occupied by male saints (according to folk tradition) are located at isolated places in the landscape such as islands and mountains. For example the cave where St. Colman spent seven years in solitude is located in a remote part of the Burren (O’Flanagan 1839, 100; Fahy 1911, 368–9). On an annual basis St. Ninnidh spent the 40 days of Lent praying and fasting in a cave on Knockninny Hill, Co. Fermanagh (Fogg and Fogg 2001, 111) while St. Carthage retired to a cave near Lismore, Co. Waterford (Coleman 1965, 30). St. Gregory sought seclusion in *Uamhain Ghrióra* on the island of Inis Meáin (Robinson 1990, 22). Another recluse, St. Éireamhán, retreated to *Scailp Eiream-háin* on the adjacent island of

Inis Mór. Both of these island caves are on the coast, locations that reinforce the isolation and wilderness of eremitic life. The longevity of the links between particular saints and caves such as these is not known: some may have Medieval or even Early Medieval origins, but some associations may be of no great antiquity.



THE MEDIEVAL RUMOUR THAT HAUNTED EUROPE

From the beginning of the Medieval period and arguably up to the present day, the most significant and best-known cave in Ireland was St. Patrick's Purgatory (Figure 9.7). It was also renowned across much of north-west Europe as an important place of Christian pilgrimage. It has been described as 'the Medieval rumour which terrified travellers, awed the greatest criminals, attracted the boldest of knight-errantry, puzzled the theologian, englamoured Ireland, haunted Europe, influenced the current views and doctrines of Purgatory, and not least inspired Dante' (Leslie 1932, vii). The early annals record that Gaelic kings and members of their families, higher ecclesiastics, lower hierarchies of monks and members of the lay population all went on spiritual pilgrimage to St. Patrick's Purgatory. Such 'journeys of faith' were common practice across Medieval Europe, undertaken as acts of devotion or to serve penance, assuage guilt, seek miracles or appeal for healing (Turner and Turner 1978, 232–3; Hopper 2002, 3, 7).



Figure 9.6 St. Kevin's Bed, Glendalough, Co. Wicklow (reproduced by permission of the Photographic Unit, NMS)

St. Patrick's Purgatory is located on one of 46 small islands that are

scattered across Lough Derg in Co. Donegal, but there is confusion as to whether the purgatory was originally on Saint's Island or on Station Island. An Early Medieval monastery seems to have been located on Saint's Island and in the 1130s the Augustinians established a house here. The chief function of this house was apparently to minister to the needs of pilgrims attending the purgatory on the adjacent Station Island (Kenney 1979, 355; Lacy *et al.* 1983, 280–2). However, in 1735 a writer stated that the purgatory had originally been on Saint's Island but was later transferred to Station Island, a contention supported by 19th and 20th century folk tradition (Pinkerton 1856, 104; O'Connor 1931, 113; Harbison 1991, 65). The present-day Lough Derg pilgrimage is to Station Island.

The earliest reference to the pilgrimage is contained in *De purgatorio Patritii* dating to *circa* 1120 and written by David Scottus of Würzburg (Kenney 1979). This document indicates that the pilgrimage was in existence before the Augustinians arrived to Saint's Island as the order only came to Ireland in the 1140s. However, it was an account penned by a Cistercian monk, Henry of Saltrey, in 1184 that brought European attention to St. Patrick's Purgatory. In his book *Tractatus de Purgatorio Sancti Patricii*, Henry explained that in the 5th century Christ led St. Patrick to a 'dark pit in a deserted place' – the island cave. The saint was instructed that whoever spent a day and night in the pit would experience 'the torments of the wicked and the delights of the blessed' and would be absolved of sin (Haren and de Pontfarcy 1988, 8). A 17th century account related that Patrick retired to the cave where he prayed that the pains of purgatory might be revealed to him. His wish was granted and after receiving a number of visions, the saint declared the island a terrestrial purgatory where sinners could repent (Seymour 1918, 11). Kenney (1979, 355) has argued that the Patrick legend echoes the *Eachtra* genre of early Irish literature which concerns a supernatural journey undertaken by a hero to the Otherworld. Such journeys usually led the protagonist overseas but occasionally underground. Another account credits the instigation of the purgatory as God's response to 'the blindness of incredulity of the Irish'. It has been suggested that this comment may reflect insufficient commitment on the part of the Gaelic-Irish to Christianity in Medieval times (Richter 2005, 176).



Figure 9.7 A 15th century illustration of St. Patrick's Purgatory, Co. Donegal (Pinkerton 1856)

Apart from explaining the origins of St. Patrick's Purgatory, Henry of Saltrey detailed a pilgrimage made there by an English knight named Owein in 1146 or 1147. During his 24-hour solitary stay in the cave, the knight witnessed devils torturing sinners. Tormented souls were nailed to the ground with red-hot irons. People were immersed in molten metal and freezing water. Sinners were beaten by devils and gnawed by serpents and toads. The knight was repeatedly dragged by devils to the entrance of hell but each time escaped by uttering the name of Christ. He also received visions of a paradise brimming with flowers and perfumes. He was given heavenly food to eat before returning to the mouth of the cave (Pinkerton 1856, 111). This account of the knight's experiences achieved enormous popularity across Medieval Europe leading to the compilation of numerous versions and translations. It appears to have influenced Dante's *Divine Comedy* (Turner and Turner 1978, 126). It may also have provided inspiration for a 14th century fresco at Todi, Italy which depicts St. Patrick overlooking the entrance to purgatory – represented as a cave with seven chambers each containing one of the seven deadly sins (Harbison 1991, 57–8). Henry's narrative prompted a large number of overseas visitors to undertake the pilgrimage to Lough Derg. Written accounts dating to between the 12th and 15th centuries survive detailing the experiences of 27 pilgrims from England, France, Hungary, Italy, the Netherlands, Switzerland and Belgium (Haren and de Pontfarcy 1988, 5–6; Easting 1991, xviii). Some pilgrims spent 24

hours in the cave where they described having visions of purgatory or experiencing physical torments. Others met and spoke with dead friends and family members while underground (Curtayne 1976, 37).

Several unsuccessful attempts were made during the Medieval period to quash the pilgrimage to St. Patrick's Purgatory involving measures such as prohibitive legislation, papal orders, adverse propaganda and the destruction of physical structures. In 1494 a Dutch Augustinian wrote to Pope Alexander V pronouncing the site 'a sham'. The Pope subsequently ordered its closure (Harbison 1991, 59). In 1497 the cave was supposedly 'demolished, as a fictitious thing, on St. Patrick's Day ... by authority of Pope Alexander VI' (MacRitchie 1901, 85). However, the Annals of Ulster recorded for the year 1497 that the 'demolished' purgatory was not the true purgatory visited by Knight Owein. It has been suggested that the Augustinian canons closed down a 'false' cave, thus conveniently allowing the pilgrimage to the original cave purgatory to continue (Harbison 1991, 59) – a wry insight into how official Church doctrine was observed whilst also remaining loyal to the popular pilgrimage tradition. A second attempt at suppression was made in 1632 by Protestant authorities when it was decreed that all extant buildings on both Station Island and Saint's Island should be demolished. Orders were given that the masonry be thrown into the lake because of the 'extremely abusive and superstitious' nature of the pilgrimage, a task successfully executed by the Anglican Bishop of Clogher (Pinkerton 1857, 67–9). Despite the obliteration the pilgrimage survived and even flourished (Campbell 1789, 151), except for the subterranean purgatory element. This was replaced by an aboveground building, as indicated in all subsequent illustrations and written accounts. The pilgrimage was again closed down in the 1780s on the pretext of dangers that might befall pilgrims as a result of overcrowding (Harbison 1991, 60). Once more these measures failed and the pilgrimage to St. Patrick's Purgatory continues to thrive into the 21st century. *The Sunday Times* (28/07/2009) reported an increase in pilgrim attendance to Lough Derg following the collapse of the so-called Celtic Tiger economic boom. For the past number of centuries, however, there has been no consciousness of the cave element to the pilgrimage.

No trace now survives of the original cave that was the site of the Medieval pilgrimage but various writers provided descriptions. Henry of Saltrey wrote of 'a round pit, dark inside' (Haren and de Pontfarcy 1988, 8). In 1411 an Italian pilgrim recorded that the cave was low but could contain nine people (Pinkerton 1857, 71). In 1430 it was described as a 'hole [*which*] is nine feet long from east to west and then turns five feet towards the south-west and as a whole is fourteen to fifteen feet long. It was built with black stones and is about two feet

wide and three feet high' (Harbison 1991, 59). In the 1540s it was likened to 'an old coal pit' and some 25 years later to 'a closet of stone' (Pinkerton 1857, 63–4). A description dating to *circa* 1600 referred to the 'door of the cave' and the need to spend 'twenty-four hours in either of the two caves' (Harbison 1991, 62). Even though the purgatory is represented as a natural cave in a 15th century illustration (Figure 9.7), most of the documented descriptions suggest a souterrain-type structure. In support of this, the underlying geology of the area comprises schist and gneiss, rock types that are not conducive to the formation of caves. Notwithstanding, the Medieval accounts of the purgatory consistently refer to it as a 'cave' and it is clear that it was *perceived* as such, both by Gaelic-Irish and by travellers from across mainland Europe. It was possibly considered more fitting that encounters with the Christian Otherworld were experienced in a natural cave rather than in a structure created by human hands. This may have been influenced by Medieval mythology which repeatedly depicted caves as places of the non-Christian supernatural Otherworld.

CAVES IN MEDIEVAL MYTHOLOGY

Medieval archaeology in Ireland has traditionally focused on castles, religious foundations and urban centres using the surviving architectural and archaeological records and, to a lesser degree, the historical sources. Manuscripts are considered important archaeological artefacts and 'factual' information (such as contained in the annals) is frequently used as an aid to confirming activities at certain sites or the date of particular events (e.g. Barry 1987, 3–9). However, the mythology contained in various Medieval manuscripts is rarely if ever used by archaeologists, except with regard to particular issues such as whether the texts might echo aspects of prehistoric society (e.g. Jackson 1964). We can, however, move beyond the narrow question of whether or not Medieval mythology might reflect quasi-historical personages or events, and use the material to draw broader inferences on how Medieval people perceived the world around them (and indeed, the Otherworld) and how they may have interacted with elements of the landscape. Mythology can also contribute some insight into popular belief systems of the time.

The surviving Irish manuscripts were composed or transcribed between the 9th and 17th centuries, but largely between the 12th and the 15th centuries (O'Curry 1861; McCarthy 2008; Ní Bhrolcháin 2009). These were usually compiled from one or more older documents and thus most of the narratives are considerably older – often several centuries older – than the date of the manuscript in which they appear. This is demonstrated primarily by the archaic

linguistic features present in the texts. The narratives contained in the manuscripts are those that circulated in oral tradition via the highly respected learned class or *file*. The recitation of myths was a central element in the profession of the *file*. It was an art form and a source of entertainment for Gaelic kings and nobility. The mythology contained in the early texts therefore relates to the literate, educated and high status Gaelic-Irish. The 12th century Book of Leinster explains that the *Ollamh* class (poets and teachers) were required by law to memorise 14 categories of 'Prime Stories' which, combined, approximated 250 individual stories. The 14 categories were listed as: Destructions and cattle raids; Courtships; Battles; Caves; Navigations; Tragedies or deaths; Expeditions; Elopements; Slaughters; Water eruptions; Visions; Loves; Feasts; and Migrations. The fourth category – Caves (*Uatha*) – comprised ten individual stories (O'Curry 1861, 242–3, 586–7) and is the only category specifically related to a particular topographical feature.

Five of the *Uatha* stories are now lost but their titles were: *Uath ecalra imchumhair* (The cave of the church of Inchummar), *Uath Lice Blada* (The cave of the rock or flagstone of Blada), *Uath belaigh conglaís* (The cave of the road of Cu-glas), *Uath Maige Uatha* (The cave of the plains of Uatha) and *Uath Maige Imbolg* (The cave of the plains of Imbolg). Of the surviving five tales, one relates to a cave in Dublin (*Uath Beinne Etair* – The cave of the hill of Howth) and one to a cave in Wicklow (*Uath Locha Lurgan* – The cave of the lake of Lurgan). The Cave of Crúachain is the subject of two further stories (*Uath Angeda* – The Cave of Aingean; and *Uath Uama Cruachan* – The deed relating to the Cave of Crúachain). Dunmore Cave forms the focus of the final story (*Uath Dercce Ferna* – The cave of Derc Ferna) (O'Curry 1861).

The three caves that recur in various manuscripts are the Cave of Crúachain, Dunmore Cave and the Kesh Caves, all of which were highly significant places in Early Medieval times (see Chapter 8), and this significance may have influenced their prominent role in subsequent Medieval mythology. There are a limited number of themes in the narratives: caves were places where dangerous supernatural women or animals resided, and these were also perilous Otherworldly locations. For example, the Book of Leinster describes the Cave of Crúachain as 'the Irish entrance to hell' while three different 14th century manuscripts record that 'the three dark places of Ireland: (*are*) the cave of Knowth, the cave of Slane, the cave of Ferna' (Ó Cathasaigh 1977, 35; Meyer 1906, 5). Knowth refers to the Neolithic passage tomb; the site at Slane is unclear; while Ferna is the older name by which Dunmore Cave was known. In this reading 'dark' probably signifies malevolency. Caves were not unique in this respect. The Medieval and post-Medieval mythical Otherworld could be found

across the sea, on islands, under mountains and in prehistoric burial mounds. It co-existed amicably with the Christian Otherworld of heaven, hell and purgatory. Though the Medieval Gaelic Irish were ostensibly Christian, a belief system populated by supernatural deities, beings, places and events of a decidedly non-Christian character thrived. Indeed, there may have been little perceived difference between the Christian and non-Christian supernatural; certainly both were interwoven in post-Medieval times (see Chapter 10).

OUT OF THE CAVE ... HER FIT ABODE

The most prominent theme in the Medieval texts is that caves were abodes of supernatural women. These women were at once feared as dangerous and omnipotent, but were simultaneously respected. Though frequently malevolent, the women were not evil *per se*. They were usually portrayed as indestructible, fierce, terrifying, vengeful, dangerous and threatening. Sexual power and seduction featured as an undercurrent in their attempts to overcome unsuspecting males. The nurturing, mothering aspect was largely absent. The supernatural woman was linked to knowledge and wisdom and in some instances to powers of divination and prophecy. Encounters with her were best avoided. The cave was portrayed as containing and safeguarding both her and her power; her essence was charged while she remained in the cave. In several instances departing the cave to venture into the outside world resulted in diminished strength whereupon the supernatural female became weak or mortal. Outside the cave she could be defeated or destroyed.

Different versions of the 14th and early 15th century *Dindshenchas* (Lore of Places) record the emergence of 'the horrid Mórrígan out of the cave of Cruachu (*Crúachain*), her fit abode' (Gwynn 1924, 201). In the *Rennes Dindshenchas* Mórrígan had a bull which she brought to mate with a cow and then took both animals into the cave (Stokes 1895, 65). Mórrígan, an anglicisation of *Mór Rígan* (great queen), was a goddess of the Tuatha Dé Danann. Her power was linked to the possession of cattle and her activities display a tutelary character. A shape shifter, she most commonly assumed the form of a black bird which appeared to warriors on the battlefield 'actively confronting a prominent individual with his impending doom' (Herbert 1996, 143–5). Similarly intimidating, the Book of Leinster described the supernatural warrior Aithbél who trampled *Luchthigern* (Lord of the Mice) at the mouth of Dunmore Cave. She was described as 'the finest of women' and was famed for having slain ten Fomorians, burned seven men, scattered a fleet of ships and hunted and killed a red hag (Praeger 1918, 149; Best *et al.* 1954, 209).

Two narratives survive recounting the capture and incarceration of

men in a cave by supernatural women. A story known as *Bruidhean Chéise Corainn* (The enchanted hostel at Keshcorran) is preserved in 66 Irish and Scottish manuscripts dating from at least 1690. It tells of a struggle between Fionn mac Cumhaill and the Fianna and three hags of the Tuatha Dé Danann at the Kesh Caves (Bruford 1966, 70–1). The three sisters sat at the mouth of one of the caves spinning:

their three coarse heads of hair all dishevelled; their eyes rheumy and redly bleared; their three mouths black and deformed, and in the gums of each evil woman of them a set of sharpest venomous and curved fangs; their three bony-jointed [i.e. scraggy] necks maintaining their heads upon those formidable beldames; their six arms extraordinarily long, while the hideous and brutish nail that garnished every finger of them resembled the thick-butted sharp-tipped ox-horn; six bandy legs thickly covered with hair and fluff supported them, and in their hands they had three hard and pointed distaffs (O'Grady 1892, 343–4).

At the sight of the hags, one by one each of the warriors trembled and lost their strength. The hags bound them with yarn and imprisoned them in the cave. Eventually, the sole surviving warrior fought and killed the hags and rescued the warriors.

Fionn mac Cumhaill was involved in another cave-related adventure. A poem contained in one version of the *Dindshenchas* explains the naming of *Tipra Sean-Garmna* – a well in Co. Kerry. Sen-Garman, a fierce warrior woman, and her son Slechteaire plundered the countryside murdering many people. They joined another female warrior, Criblach, and her son Crimthand, and the four took up residence in a cave in Co. Kerry. They captured Oisín, son of Fionn mac Cumhaill, and held him prisoner there. Oisín dropped shavings from the shaft of his spear into a river which issued from the cave. Recognising the chips of wood as a message from his son, Fionn followed the river into the cave and rescued him (Gwynn 1913, 243–53).

A series of supernatural women were linked to the Cave of Crúachain. This site may have been named after the goddess Cruachú who was reputedly buried there. Elsewhere it is known as the Cave of Ainged possibly in reference to a woman of the *sídh* (Löffler 1983, 108). The tutelary goddess Medb is connected to the cave in *Liber Flavus Fergusorum*, so too is Scothníam of the Tuatha Dé Danann in *Acallamh na Senórach* (O' Curry 1861, 44, 532; Stokes and Windisch 1900, 111). Scothníam was described as a woman who 'had no great fear of what was before her and little for what was behind' (Dooley and Roe 1999, 212). In these instances very little is contained in the texts apart from brief references linking supernatural females to the cave. Fortunately one story survives in greater length. It is known variously as *Uath Uama Cruachan* or *Uath Angeda* or *Eachtra Nerai* or

Táin Bó Aingen with versions preserved in 12th and 14th century manuscripts. The story relates that Queen Medb and King Ailill were celebrating the feast of Samhain (the eve of 1st November) in their palace at Rathcroghan. The warrior Nera Mac Niadhain accepted a challenge from Ailill to tie a coil of twisted twigs round the leg of a hanged man. The dead man asked Nera to carry him to the nearest house and fetch him a drink. When Nera returned he saw Rathcroghan fort on fire and those who lived there massacred. He followed the *sídh* who had perpetrated the crime into the Cave of Crúachain. There he met the king of the *sídh* who sent Nera to a woman of the *sídh*, and he lived with her in the cave for some time. She told him that what he had seen was a prophetic vision of the destruction that would befall Rathcroghan the following Samhain. Nera left the cave bringing with him garlic, primroses and buttercups. He warned Medb and Ailill of the impending attack and spent the remainder of the year in the mortal world. He subsequently returned to the cave and his supernatural wife. In the intervening period she had given birth, in the cave, to their son. In some texts the infant is called Aingen. The following Samhain Medb and Ailill waged war on the Cave of Crúachain but Nera protected his family and cattle during the attack and remained in the cave ever after (Meyer 1889; Cross and Slover 1936, 248–53; Koch and Carey 1995, 117–22).

The association between supernatural women and caves as represented in the Medieval mythology continued as a dominant theme in the folktales of recent centuries (Chapter 10). *When* this theme originated is impossible to say but it is worth asking what such an association might mean. In a Medieval context most if not all of the *file* class were male, their audiences were predominately male, and those who transcribed the oral tradition to written form were male. The cave-dwelling females did not mirror the everyday experiences of Medieval women who enjoyed limited social, economic and political power in comparison to their male contemporaries. A similar pattern is apparent in the Medieval Scandinavian literary tradition. Within this patriarchal society mythological females were also represented as supernatural prophetesses, wise women and witches who were linked to magic, fate, destiny, prophecy and divination. The dichotomy between the mythology and the social reality has been interpreted by Kress (1990, cited in Raudvere 2002, 119) as representative of a pre-Christian female oral tradition that was annihilated by a male literate Christian Latin culture. She perceived the Scandinavian texts as reflective of a battle between the sexes with women representing a regressing culture. This equation has been challenged as overly simplistic. Raudvere (*ibid.*, 120) contends that ‘Being a woman is surely not a marginal position as such, but certain scenes in the sagas

focus on women acting in a way they usually did not, that is, outside the conventional limits of supposed female behaviour’.

Another way of viewing the mythology is in the context of how men perceived the small number of politically powerful women that existed in north-west Europe in Medieval times. LoPrete (2005, 18) claims that their ‘exceptional’ position within the male domain of public power meant that such women were ‘perceived as, and treated like, surrogate men ... they were rare to the point of being uncanny, arousing intense anxiety in their male contemporaries, who viewed them as scandalous aberrations if not outright monsters. They were transgressors of the natural order’. The supernatural cave woman theme of Irish literature depicts the feminine in a similar fashion. These women were attributed traditional masculine characteristics (ruthlessness, virility and bravery) and stripped of what would have been conventional feminine roles (nurturing mothers and dutiful wives). These same ‘manly traits’ have also characterised the historically-documented women that were active in the political and social spheres of Medieval and post-Medieval Ireland. Historical figures such as Elizabeth Dowdall, Máire Rua and Granuaile have been noted for strategic political manoeuvring, brutality, wiliness and sexual promiscuity (Whelan 2005, 124).

The supernatural cave woman of early Irish literature posed a threat to mortal males but seemingly not to mortal females or children. There is an implication that male power was lost when the supernatural female was encountered or her cave was entered. This is most succinctly portrayed in the *Bruidhean Chéise Corainn* where the warriors of the Fianna became immobilized on encountering the hags. They are bound and held captive in the cave. This may reflect the Medieval Christian attitude to female sexuality which was overtly negative, and the perceived danger of sexual encounters with women. The church associated the sin of lust to women. Thus sheela-na-gigs – the grotesque and sexually explicit Medieval carvings of naked women found on church and castle walls and along pilgrimage routes – represented the dangers of lust (Wood 1981, 712; Kelly 1996, 9–10). French pilgrim Louis d’Auxerre who visited St. Patrick’s Purgatory in 1358 recorded that one of the visionary temptations he encountered in the cave was a host of beautiful women attempting to seduce him (Curtayne 1976, 36). The seductive cave woman may represent the ultimate sin that tempted and threatened the Christian male, and perhaps specifically the celibate male ecclesiastic. Entering the cave may have symbolised the act of sexual intercourse, or the cave may simply have reflected forbidden territory. Engaging with women, entering their world physically or emotionally, was dangerous. The archaeological evidence reveals that caves were little-used in Medieval

times. This may well have served to promote concepts that caves were unknown mysterious places. It could have been how the Christian male, or the celibate ecclesiastic, was encouraged to view women.

A CAVE FIT FOR A KING

Though the supernatural personages associated with caves in Medieval mythology are overwhelmingly female, the Kesh Caves are associated with two semi-divine males. *Duanaire Finn* (The poem book of Fionn mac Cumhaill), compiled *circa* 1626–7, relates that one day Fionn mac Cumhaill and the Fianna were approached by Lon Mac Líomhtha, a master smith and formidable warrior. He had a single foot, three arms, his face was black as coal and he had one eye in the centre of his forehead. Lon put a *geis* on the warriors to follow him (a *geis* is best approximated with a taboo or instructions related to prescribed behaviour). The journey was long but they eventually arrived at the Kesh Caves wherein his smithy was located. Lon gave each of the warriors supernatural weapons that had been made in the cave and they slept there overnight (Murphy 1933, 2–15). In the folklore of recent centuries this story has migrated. A race between Caoilte, Fionn mac Cumhaill and an unknown stranger terminated inside the Cave of Crúachain where a group of smiths were at work (O’Curry 1861, 587). In Irish literature the blacksmith is afforded special treatment ‘underscoring ... traces of the magico-religious status of the smith which survived the coming of Christianity, and lasted through to recent times’ (Scott 1991, 185). The alchemic art and skill involved in metalworking seem to have marked him out as a person apart, someone significant in the community (Eliade 1956). An association with caves only served to heighten the smith’s mystique.

Not only were the Kesh Caves a suitable location for the workshop of the master smith of Ireland, it was here that the country’s most benevolent highking was reared. A legend entitled *Cath Maige Mucrama* (The battle of Maige Mucrama), dating to at least the 12th century, describes the conception, birth and rearing of Cormac Mac Airt who later became high-king of Tara (Ó Cathasaigh 1977). Cormac was the ideal king, ‘Ireland became a land of promise in his reign’ (*ibid.*, 24). The narrative tells that on the night before the battle the high-king, Art, went to the house of a supernatural smith named Olc Aiche (*Olc* derives from ‘wolf’). It was prophesised that if the smith’s daughter, Achtán, slept with Art, their descendants would be kings. The couple spent the night together and Cormac was conceived. The following day Art died in battle. Nine or seven months later the baby was born. Olc Aiche placed five supernatural safeguards on the infant to protect him from being wounded, from drowning, from fire, from enchantment and from wolves. In some versions Achtán is fleeing

enemies and collapses at a well in Co. Sligo where she gives birth. Before falling asleep she cuts off one of Cormac's toes so that he would always be recognisable to her. A wolf then abducts the baby and brings him to one of the Kesh Caves wherein he is reared along with her pups (Figure 9.8) – possibly a borrowing from the Roman legend of Romulus and Remus who were suckled by a wolf in the Cave of Lupercal. The child king Cormac is said to have spent up to seven years in the cave. Ó Cathasaigh (1977, 3–6, 55) contends that this motif in Cormac's life closely mirrors the international heroic biography and that the child's stay in the cave and his subsequent return to human society can be interpreted as 'a ritual death and rebirth of the kind found in initiation scenarios. The hero dies to this world (journeys to the Otherworld) and is reborn (returns from the Otherworld)'. On the 1st Edition Ordnance Survey Map of 1837, Plunkett Cave at Kesh is identified as *Owey Cormac Mac Airt* (The cave of Cormac Mac Airt). The *Ordnance Survey Letters* compiled in the 1830s recorded a lengthy version of the story which was part of the oral repertoire of people in the area – testimony to the remarkable longevity of Irish oral narrative tradition.



Figure 9.8 The infant king Cormac reared by wolves in the Kesh Caves, Co. Sligo (Illustration Dómhnaí Ó Bric)



Figure 9.9 Diarmuid and Gráinne's Cave, Co. Sligo. Note the seated person to the left outside the cave entrance (Photo Ciarán Davis)

LOVERS IN CAVES

Then southward he turned to the Wood of the Two Sallows, where Gráinne and Angus bided his coming. To him said the latter when bidding farewell: "My son, I leave this counsel to guide you when I am gone. Go not into a tree having only one trunk; nor enter a cave with but one opening; never land on an island that has only one channel of approach; where you cook your food do not stay to eat it; where you eat do not sleep; and where you sleep to-night sleep not there to-morrow night." And Diarmuid promised his foster-father that he would keep this warning in his memory during the days of his life (Carbery 1904, 37–8).

The quasi-supernatural lovers Diarmuid and Gráinne are associated with caves in the early literary texts as well as in the folklore of recent decades. *Tóraidheacht Dhiarmada agus Ghráinne* (The pursuit of Diarmuid and Gráinne) is recorded in at least 41 manuscripts. The earliest account dates to 1651 but the tale was in circulation during the 10th century (Ní Shéaghda 1967, x, xiv; Dooley and Roe 1999, xli). Gráinne was daughter of Cormac Mac Airt, the high-king of Ireland who had been reared in the Kesh Caves by a wolf. It was arranged that Gráinne would wed the aging Fionn mac Cumhaill – a warrior involved in several exploits at caves (see above). Gráinne decided otherwise and placed a *geis* on the youthful and handsome Diarmuid Uí Dhuibhne who reluctantly eloped with her. The vengeful Fionn pursued the lovers across the country and they were thus forced to spend each night at a different location, quite often megalithic tombs or caves. As illustrated in the opening quote, it was forbidden for Diarmuid to spend any night in a cave with only one entrance (Ní Shéaghda 1967, 29). He unintentionally broke the *geis* which

foreshadowed his death (Löffler 1983, 110). One account related that the couple sought refuge in a cave on the Hill of Howth, Co. Dublin. Diarmuid received protection from a hag who lived there but she later betrayed him (Ball 1917, 14; Cross and Slover 1936, 422). Diarmuid and Gráinne's Cave, Co. Sligo is erroneously famed for being the cave at the highest altitude in Ireland; it does, however, have the largest entrance of any Irish cave (Figure 9.9). The associated folktale relates that Gráinne lived there with the aging Fionn. When she desired the company of Diarmuid, she put a *geis* on her unsuspecting husband sending him to work far away from the cave (Wood-Martin 1902, 51).

RED BIRDS, DRUIDIC CATS AND WEREWOLVES

The early literary texts feature a number of references to supernatural animals emerging from caves, typically malevolent and destructive creatures. Once more the Cave of Crúachain figures prominently (Figure 9.10). The Book of Leinster relates that the plain of *Maige Mucrama* was named after supernatural pigs that emerged from the cave. It was also home to 'the monstrous triple-headed bird that wasted Erin [*Ireland*] ... Out of it, also, came the red birds that withered up everything in Erin that their breaths would touch ... Out of it, moreover, came these swine. Whatever land they traversed no corn or grass or leaf grew on it until the end of seven years' (Stokes 1892, 449). The narrative *Fled Bricrend* (The feast of Bricriú) is contained in at least four manuscripts, the earliest of which is *Leabhar na hUidre* which was compiled *circa* ^{AD} 1100. It relates that 'three cats, three druidic beasts, were loosed from the cave of Crúacha' (Cross and Slover 1936, 268; Gantz 1981, 239).

Céadach is one of the most popular of all Irish tales, preserved in at least 116 manuscripts dating from the 15th century. Amongst his various adventures and exploits, Céadach had to journey to a cave that was located 300 miles under the earth to visit a monstrous cat that had been there for 300 years. A vicious encounter ensued which resulted in the death of both cat and hero. Céadach's corpse was removed from the cave but he was brought back to life by his wife with the aid of supernatural powers (Bruford 1966, 123; O'Sullivan 1966, 38–56). In a 1651 version of *Tóraidheacht Dhiarmada agus Ghráinne*, a sub-story in the text describes a one hundred-headed serpent that retreated to *Uaimh Dheirce Ferna* (Ní Shéaghdha 1967, 63). In this story the cave is located in Co. Kerry but *Derc Ferna* is generally seen as referring to Dunmore Cave, Co. Kilkenny. A similar tale preserved in both the Book of Leinster and the Book of Ballymote (late 14th century) explains the naming of a place known as Cu-glas. Cu-glas, son of the king of Leinster, was a distinguished huntsman. One day he and his hounds were on a chase that began at Tara. When

they reached a particular road the hounds disappeared into a cave. Cu-glas followed them but neither hunter nor hounds were ever seen again (O'Curry 1861, 586). Yet another version tells that a hunter followed supernatural pigs into the cave and arrived at the *sídh* palace of Bri Léith (Cross 1910, 461).



Figure 9.10 The Cave of Crúachain, Co. Roscommon (Photo Marion Dowd)

It is not surprising to find that wolves are repeatedly associated with caves: these animals would have inhabited caves in Medieval times. The 12th century *Acallamh na Senórach* (The colloquy of the Ancients) relates that three werewolves were the last of the 'grievous company' to come from the Cave of Crúachain (Ó Cathasaigh 1977, 36). In the Book of Leinster these cave-dwelling wolves were associated with Olc Aí (whose name bears lupine connotations), a supernatural man of the *sídh*. The Rennes *Dindshenchas* records that Olc Aí emerged from the Cave of Crúachain. So enraged was he by an act of sexual misconduct that he shook his beard and gnashed his teeth terrifying a group of women to such an extent that they ran into a lake and drowned (*ibid.*, 31, 36; Stokes 1894, 484). Another 12th

century manuscript tells of three female wolves, women of the *sídh* in disguise, who emerged annually from the Cave of Crúachain. On each occasion they destroyed all the sheep they encountered. The only humans they trusted were men with harps and lutes. In this manner the wolves were enticed from the cave and assumed their human form. Without their protective guise, a spear was thrown which passed through the three women binding them together. They were then beheaded (Jackson 1971, 162–4).

FINDING A HOME FOR MEDIEVAL MYTHOLOGY IN ARCHAEOLOGICAL DISCOURSE

Using myths that were transcribed in Medieval times to better understand the contemporaneous population is territory few archaeologists have explored with confidence (though with some exceptions, see Waddell 2014). There are several instances where myths pertaining to a particular landscape or monument are detailed (e.g. O'Kelly 1994, 45–8; Waddell *et al.* 2009), but these are usually not interrogated as to what they might reveal about Medieval people and the Medieval mindset. In truth, the disciplines of archaeology and early Irish literature have largely maintained a distance, one that has been highlighted by Thompson (2004, 348). This general reluctance to integrate Medieval mythology with archaeological data (and the similar gap between archaeology and folklore) frequently seems to revolve around issues of historical veracity. But as Thompson has argued, the issue is *not* whether narratives are historical accounts. Such an approach implies that empirical evidence and factual data alone are of value. The importance of mythology is that it provides a unique and crucial insight into how people – the Gaelic-Irish in this instance – defined and constructed their world. This resource offers the archaeologist an opportunity to enrich her/his understanding of how life and landscape were viewed through Medieval eyes.

The narratives recorded in early manuscripts were an integral part of the every-day lives of the Gaelic-Irish population, versions of stories that were widely circulated in social settings. The mythology reveals that for many people certain caves were highly charged places in the landscape, steeped in a rich body of lore and popular belief which transformed them into potent supernatural locales, places that were ‘alive’ and active. Thus mythology provides a window on a dimension of human experience that does not have an archaeological register. By neglecting these narratives – which are not historical accounts – an important aspect of the cultural value of topographical features and archaeological sites is lost. To take one example, the Kesh Caves have not produced any archaeological material of Medieval or post-Medieval date (Dowd 2013b). There are no Medieval buildings or features in the immediate environs, and no historical accounts to

indicate that the caves featured in political or religious events of the period. A traditional archaeological approach might therefore conclude that the caves had become redundant features in the landscape by the 12th century. The early texts, however, present a strikingly different viewpoint. Throughout the Medieval period these caves were widely known on a regional and possibly national level. They were landmarks in the local landscape, regularly featuring in narratives that linked them to royalty, supernatural personages and the non-Christian Otherworld. It is reasonable to suppose that the Kesh Caves would have evoked feelings of awe, trepidation, fear and even reverence in those who lived in the area, or people further afield who never saw the caves but knew of them through oral narrative. Here, it is the mythology – not the archaeology – that offers an explanation as to why caves were largely not used for secular purposes in Medieval Ireland: caves were places of the supernatural.

A RETURN TO THE RELIGIOUS

The identifiable archaeological material of Medieval date from Irish caves is both sparse and limited in nature. Little wonder therefore that caves do not feature in archaeological textbooks related to the period. This contrasts markedly with the rich Early Medieval assemblages, a period from which there is extensive evidence for the appropriation of caves to fulfil a wide variety of secular and religious functions. The pattern of usage changed sometime around the 12th century when cave use dramatically decreased, almost ceased. The opposite might be expected. Because of the greater levels of displacement in Medieval society, one might imagine an upsurge in cave usage for short-term occupation by the dispossessed or peasant classes. There is no evidence to support this and no indication that caves were used for secular purposes. It seems there was a rejection of the Early Medieval practical use of caves and a reversal to long-standing traditions where caves were associated with the religious dimension of life, echoing traditions that had prevailed for over 8000 years prior to the arrival of Christianity. There is nothing in the archaeological record to support this change but documentary sources reveal that St. Patrick's Purgatory fulfilled the role of the Medieval Christian Otherworld while other caves may have been sought out by holy men as places of seclusion. The early literary texts also identify several caves that were perceived as places of the non-Christian Otherworld. The absence of material culture speaks of a general avoidance of caves in Medieval Ireland. This may have been a realm outside of everyday life and some caves may have been sacred and revered. Why the reversal?

The religious reforms of the 12th century which sought to bring the Irish church in line with the church elsewhere in Europe (O'Keeffe

2000, 132) may have had some bearing on the shift as to how caves were perceived. In Medieval Europe caves served two main symbolic roles: they were retreats of saints and locations of hell or purgatory. These themes feature in paintings by Medieval artists such as, amongst others, Duccio di Buoninsegna, Giovanni Bellini, Dante (Durante degli Alighieri), Albrecht Dürer, Jacopo Bassano and Hans Memling, while an illustration in the 12th century *Hortus deliciarum* depicts hell as a series of caverns. The Gaelic-Irish are likely to have been influenced by Continental traditions surrounding caves and their role (real or symbolic) in religious life. The association between caves and purgatory is emphasised by the willingness of wealthy Christian aristocrats from across Europe to make the lengthy and difficult pilgrimage to the isolated cave known as St. Patrick's Purgatory in the north-west of Ireland. These pilgrims were coming to a country where the dark world of caves was inhabited by saints, supernatural women and malevolent animals – associations that persisted for several subsequent centuries.

Chapter 10

Diverse Biographies Post-Medieval Period to 21st Century (AD 1550–Present)

As a result of the British colonial regime and associated plantations, by 1660 20% of Ireland's population was immigrant. Coupled with this was a demographic explosion: the population doubled from 1.5 million in 1600 to 3 million in 1700 and had reached an estimated 8.5 million by 1840, immediately prior to the Great Famine (Aalen *et al.* 1997, 23). This led to more intensified use of farmland and the expansion of settlement into areas of marginal ground. It would be reasonable to expect, given the increased population and the dispossession of land, that there would be plentiful evidence that caves were used for shelter or occupation, but archaeological material is virtually non-existent. The social history, folklore and popular religious practices of these centuries, however, reveal rich cultural traditions around caves and how they were appropriated and perceived. In a predominantly agricultural society, caves played an important role in shaping people's identity, their sense of place, and their popular belief system as well as offering enclosed spaces that could be harnessed for practical purposes (Figure 10.1).

FLEEING TO WOODS AND CAVES

Folk traditions reveal that caves were regularly sought out as places of refuge during some of the most vicious wars of the past 400 years, in particular the Irish Rebellion of 1641, the 1798 Rebellion, the War of Independence (1919–1921), and the Irish Civil War (1922–3). Certain caves thus served as physical reminders – even embodiments – of experiences, events, memories and emotions that may have left little or no physical trace. These caves were transformed into meaningful places that became integral to local identities and histories. In most cases the identities of those who hid in particular caves has been lost to history though vestiges may be preserved in the name by which a

cave was subsequently known. For instance, a cave called *Leaba Eamoinn* (the bed of Éamonn), Co. Kilkenny is said to have been named after a Tory who sought refuge there in the 17th century (O'Donovan 1839, 174–5). An interesting twist is suggested in the tradition that a rebel known as Croghan hid in the Cave of Crúachain, Co. Roscommon (Ferguson 1864/6, 161). One wonders whether in this particular case the Medieval name for the cave – *Úam Crúachain* – was anglicised and actually served to name the rebel! As is often the case, stories are created to explain the meaning behind an existing name when its true origin is unknown or lost.

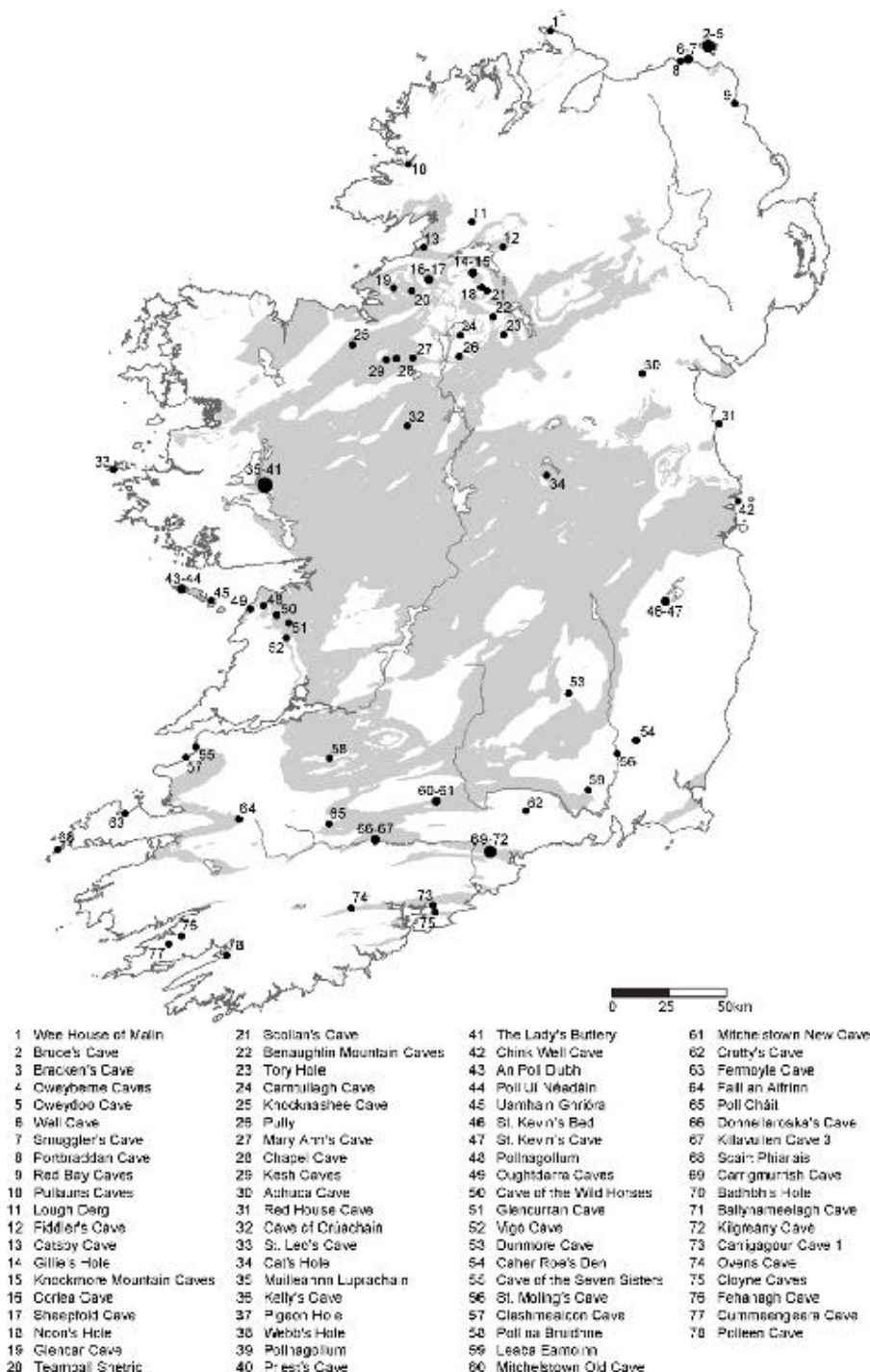


Figure 10.1 Caves of cultural significance in Post-Medieval and modern Ireland



Figure 10.2 Bruce's Cave or Oweynagolman, Co. Antrim (Photo Andy McInroy)

There are occasional instances where historical figures are linked to caves. Bruce's Cave (Figure 10.2), located beneath Bruce's Castle on Rathlin Island, is only accessible from the sea. Robert the Bruce is said to have sought refuge there over the winter of 1306–7 following his defeat at the Battle of Methven (S. McS. 1833; Forsythe *et al.* 2012, 156). In local tradition, however, the cave beneath the castle is known as Avaragh Cave or Oweynagolman, while a sea cave some 275m from the castle is regarded as Bruce's Cave – though it is unlikely ever to have been habitable (www.andymcinoiroy.com). Could this be an example of the migratory nature of folktales? Other caves on Rathlin also have historical associations. When Sorley Boy MacDonnell was dispossessed of his lands in Ulster in 1575 by the Earl of Essex, the families of he and his supporters sailed to Rathlin Island and sought sanctuary in sea caves. They were pursued by the English and 'hunted out as if they had been seals or otters, and all destroyed'. Accounts record that 300 or 400 were massacred, primarily women and children (Hartwig 1871, 172). Mitchelstown Old Cave, Co. Tipperary was formerly known as Desmond Cave in honour of James Fitzgerald, the *Súgan* Earl of Desmond, who was captured there in 1601 following the failed Second Desmond Rebellion. He was subsequently charged with treason and died in the Tower of London. The event was recorded in a contemporaneous account – *Pacata Hibernia* – and the date '1602' has been noted carved into the cave wall (MacNeill 1989,

Almost none of the caves recorded in folk tradition as hiding places have been excavated, but post-Medieval finds from two sites suggest that they may have acted as places of refuge. According to local tradition, victims of the 1641 Rebellion were sometimes thrown into the sea near the coastal village of Portbraddan, Co. Antrim. Some of the recovered corpses were laid out in Portbraddan Cave before being brought to an adjacent graveyard (Bertie McKay pers. comm.). Caves on the Scottish island of Jura were similarly used sometime prior to the 19th century as *corpachs*, or temporary resting places for the dead (McConkey 2012, 192). The barrel of a muzzle-loading pistol and a possible bayonet fragment found in the upper strata of Portbraddan Cave during excavations in the 1930s may substantiate this folk memory (May 1943, 50). In Ireland, pistols date from the mid to late 16th century and would have been reserved for cavalry arm and gentlemen, thus the Portbraddan example could conceivably relate to the 1641 Rebellion. Bayonets, however, only began to appear in armies in the late 17th century (James O'Neill pers. comm.). At Kilgreany Cave, Co. Waterford a quantity of late 17th century pottery was recovered from the inner chamber of the cave (Dowd 2002, 96). The assemblage represents three jugs, at least four large pots, two chafing dishes, two pancheons, a jug, a plate and an ointment pot (McCutcheon forthcoming). A coin, token and several clay pipe fragments, all dating to between *circa* 1660 and 1680, were also found (Figure 10.3). Together, these finds have led McCutcheon (*ibid.*) to conclude that Kilgreany Cave was used 'by an individual or individuals during a period of unrest in Ireland in the later seventeenth century'. The high-quality nature of the material is not consistent with what one might expect of a person or family reduced to living in a cave. Rather, it suggests someone of means who may have had a reasonably comfortable sojourn there.



E9:655



E9:646



Figure 10.3 St. Patrick's farthing from the reign of Charles II; token of 'John Merrick ... of Youghal' from Kilgreany Cave, Co. Waterford (Illustration Malgorzata Kryczka)

A number of other caves have associations with the 1641 Rebellion. Lord Herbert in his 1673 *Report on the State of Kerry* documented that during the rebellion 'it was death for any man, woman, or child, to be seen in the baronies of Dunkerron, Glanerought and Iveragh, yet many of them lingered on in the caves and woods of their well nigh inaccessible mountains' (Hickson 1872, 117). Poet Edmund Spencer recorded that the Irish would flee 'from the towns into the caves and woods ... emerging like ghouls to feed on corpses, carrion or grass' (*ibid.*, 158). Piaras Feirtéar, a Gaelic poet and leader of the rebellion in Kerry, sought refuge in a cave subsequently named *Scairt Phiarais* (the hiding cave of Piaras) on the Great Blasket Island but was

apprehended and hung by Cromwellians in 1653 (O'Sullivan 1931, 514–7). A cave known as Cat's Hole, Co. Westmeath was noted in the late 18th century as 'the lurking place of the chief of the Westmeath rebels' (Seward 1795, 92). On the island of Inis Mór, Co. Galway, fugitive Pádraic Mór O'Flaherty retreated to a cave in the woods after the Cromwellian army took the castle of Aircín in 1651. After English soldiers discovered his whereabouts he retreated to a second cave where he was later captured (Robinson 2009, 321–2).

In preparation for the 1798 Rebellion 'every male adult in Raghery, except the parish priest and one other gentleman, took the test of an United Irishman, in the gloomy recesses of Bruce's Cave' on Rathlin Island (S. McS. 1833). In Wexford two gentlemen involved in the same insurgence hid in a cave on one of the Saltee Islands for six months before being captured (Coyne and Bartlett 1842, 93–4). They were apparently discovered when soldiers noticed laundry suds that had been thrown out the cave entrance by their maid! Kelly's Cave, Co. Mayo is supposedly named after a fugitive who sought refuge there following the 1798 rebellion. This natural cave has been artificially enlarged and modifications include rock-cut steps leading down from the entrance and drystone benches running along the cave walls (Figure 10.4). A pool of water at the rear of the chamber provides a valuable resource. Charcoal and animal bones were found during excavations by Gerhard Bersu in 1948 (Top. files, NMI). One hypothesis is that the modifications relate to religious activities of Medieval date and that the cave may have functioned as a hermitage associated with the nearby ecclesiastical site at Cong which became an Augustinian abbey in the 12th century (Top. files, NMI; Manning 2005, 116). An alternative theory is that Kelly's Cave, located as it is on the grounds of Ashford Castle demesne, was 'landscaped' in the 18th or 19th century and converted into a folly or garden feature. A pathway between the castle and a second cave, Pigeon Hole, was apparently created around this time to facilitate leisurely walks. A flight of stone steps leads down into Pigeon Hole where a bench is located that allows visitors to watch the river flowing through the cave (Quinn 1996, 221). These steps were in existence by the end of the 18th century (Seward 1795). Parallel examples have been documented in Britain (Jones 1979).

Because caves only occur in limestone which is confined to certain parts of Ireland, inevitably there is a level of regionalism in the folk traditions about caves. Cork, for example, is replete with accounts of caves that were used as hideouts, to store arms and even as centres of intelligence operations. For instance, Lake Cave was used by soldiers as a hideout and for short-term occupation during the Civil War (Coleman 1941, 24). In 1934 caver Jack Coleman discovered arms

inside one of the entrances to Ovens Cave in a chamber thereafter named the 'Gun Room' (Figure 10.5). This site was within the operating area of the 3rd Battalion, Cork No. 1 Brigade, IRA which fielded a small flying column during the War of Independence and the Civil War. The arms were probably concealed in Ovens Cave towards the end of the Civil War (Dowd 2013c). In 1935 Coleman also came across six rifles and a bayonet inside the entrance to one of two caves at Carrigagour, Co. Cork (Coleman unpublished). Arms related to the 1920's 'Troubles' were also found in a chamber of Pollnagollum Cave, Co. Clare which was thereafter named 'Gunman's Cave' (Coleman and Dunnington 1944/5, 113). A cave on *Inis Mór*, Co. Galway known as *Poll Uí Néadáin* had earlier been used by Fenians and Land-Leaguers to hide weapons during the Land War of the 1880s (Robinson 1990, 58).

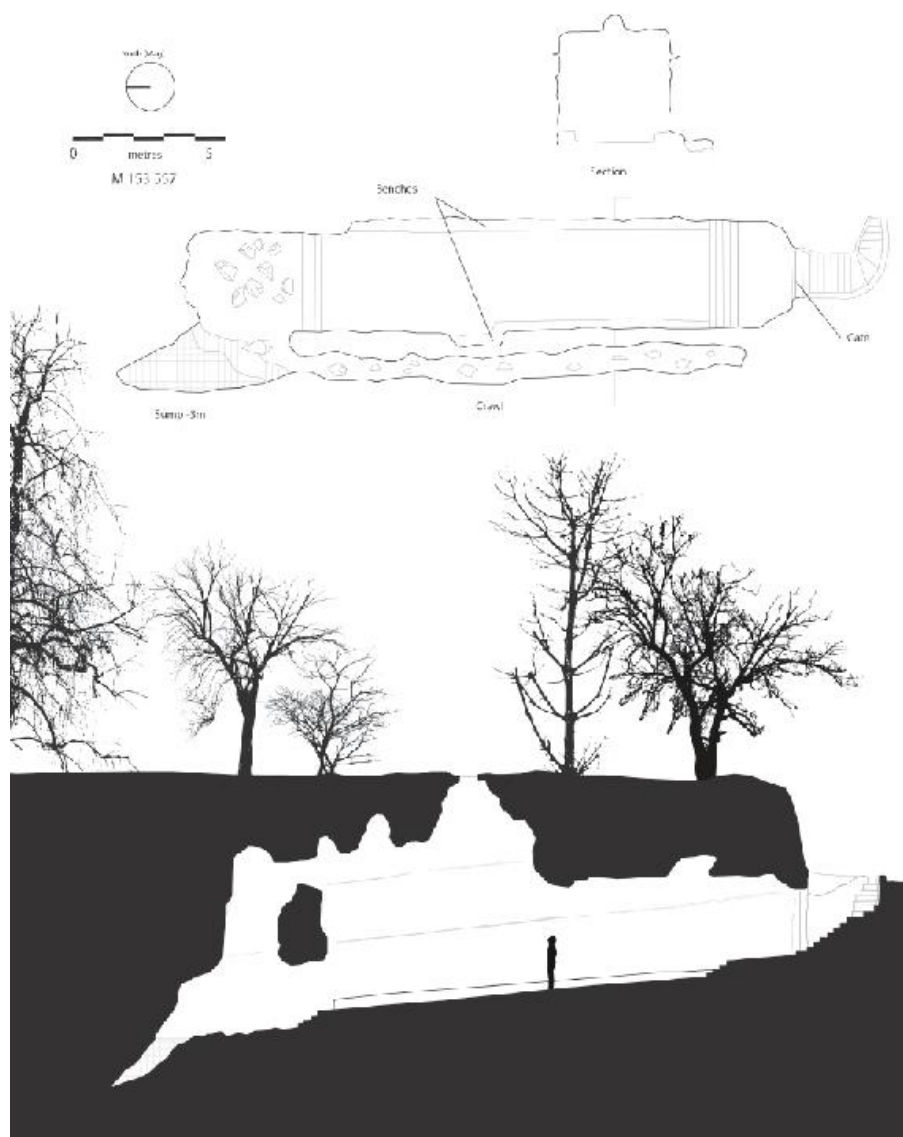


Figure 10.4 Plan and profile of Kelly's Cave, Co. Mayo (Illustration Peter Barry and Alasdair Kennedy)

During the War of Independence members of the IRA Flying Column (3rd Tipperary Brigade) took refuge in Mitchelstown New Cave, Co. Tipperary. As a reprisal for sheltering the Republicans, the home of the family that owned the cave was burnt down in 1921 (Coleman 1965, 18). The IRA also investigated the hideout potential of Dunmore Cave, Co. Kilkenny in the early 1920s but decided that the cave was of 'little strategic value' (Brennan 2000, 25). A cave at Fehanagh, Co. Kerry was used as a hiding place by local IRA volunteers during the

War of Independence. The name O'SHEA is painted in white on the rock face (ASI archives). A cave at Glencar, Co. Sligo is still remembered locally as an IRA hideout; 34 men hid there for six weeks in 1922. During the more recent 'Troubles' of 1969–1994 in Northern Ireland, caves at Oweyberne on Rathlin Island were ransacked by the Royal Navy in search of arms (Forsythe 2012, 215). An ammunition dump found in a cave in Donegal appears to relate to recent IRA activity (Anonymous informant). The Provisional IRA are linked to another cave in north Dublin (Anonymous informant).

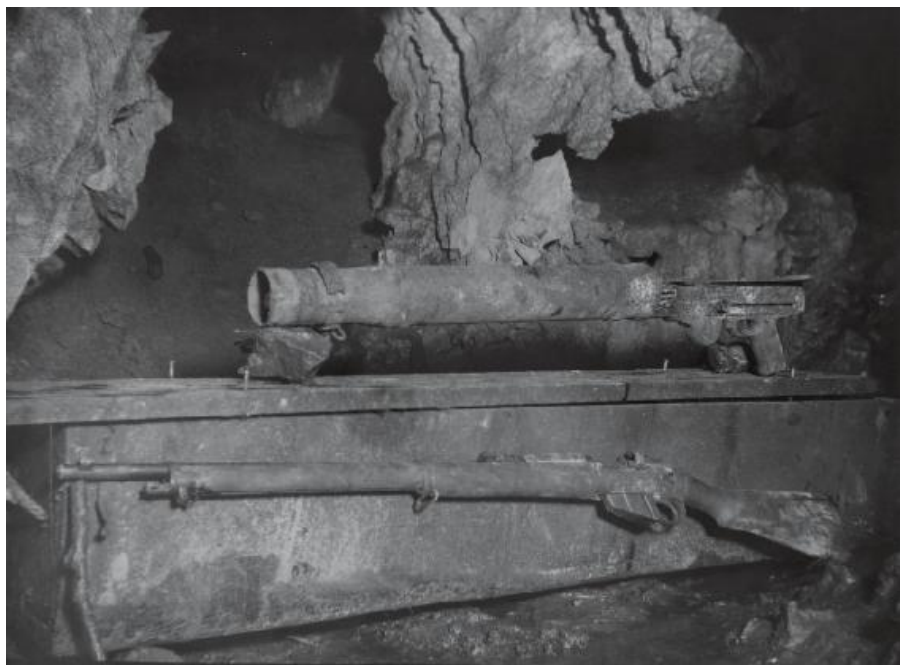


Figure 10.5 Lewis machine gun and Lee-Enfield .303 rifle in Ovens Cave, Co. Cork. Taken by Jack Coleman in 1934 (Reproduced by permission of the SUI)

Arguably the most famous cave hideout of recent decades is Dumfort's Cave (or Dunforth's Cave, though better known as the Clashmealcon Caves), a coastal site on the cliffs of north Kerry. In 1923, Timothy 'Aero' Lyons (Figure 10.6) and five other IRA Volunteers occupied the cave for three days and two nights, besieged by Free State troops. A failed attempt was made to smoke the Volunteers out of the cave. Two men attempted escape one night but fell from the cliffs and were drowned in the sea. The following morning, the Free Staters detonated mines at the cave entrance and attacked with gunfire and grenades (Ó Snodaigh 1998). One account claims that the Republicans shot and killed two of the soldiers and

that Lyons and his compatriots escaped to a second cave further along the coast (n. a. 1973, 13). Eventually, Lyons surrendered. A rope was lowered down the cliffs to the cave mouth and he began climbing up, but apparently the rope was severed and he fell to his death. The surviving Republicans were captured and later executed (Barrington 1999, 128; Hopkinson 1988, 242). The Clashmealcon Caves event is considered one of the last acts of extreme violence of the Irish Civil War (John Borgonovo pers. comm.). A major commemoration took place there in 1973 to mark the 50th anniversary of the event.



Figure 10.6 Timothy ‘Aero’ Lyons in 1922, a year before his death at the Clashmealcon Caves, Co. Kerry, during the Irish Civil War (Reproduced by permission of Mercier Press Archives, Cork)

CAVES IN PENAL TIMES

Anti-Catholic legislation introduced in the 1690s sought to displace Catholicism and impose Protestantism as the dominant religion in Ireland. The Penal Laws, as they became known, persecuted those who practised Catholicism, prohibited the celebration of Mass, and limited the number of clergy until Catholic Emancipation in 1829. Despite the oppressive legislation, clandestine Masses were held at secret isolated locations such as Catsby Cave, Co. Donegal; Pollanaffrin (the cave of the Mass), Co. Fermanagh; a cave known as *Teampall Shetric* (the church of Setric), Co. Leitrim; and a cave named *Faill an Aifrin* (the cliff of the Mass) at Kilmurry, Co. Kerry. Though archaeological

deposits are likely to be scant at Penal Mass sites, at Ovens Cave some tentative evidence survives in the Mass Rock Chamber which, according to folk tradition, was where Mass was celebrated. This part of the cave was artificially enlarged. A thick deposit of soot once covered the cave roof here and stalagmite blocks were believed to have functioned as a rudimentary altar (Evans 1911b, 180; Coleman 1940, 49). At Fermoy, Co. Kerry an iron hook embedded in the roof of a cave was said to have been used to hang the lamp that lit the liturgy (Hickson 1872, 152).



Figure 10.7 Carvings on the walls of Lettered Cave, Knockmore Mountain, Co. Fermanagh (Photos Marion Dowd)

A group of caves on Knockmore Mountain, Co. Fermanagh were also apparently used to celebrate Mass in Penal times, their inaccessibility being advantageous for this purpose. Wakeman (1866/9; 1891) recorded what appear to be Christian carvings incised on the walls of three of the caves including interlaced knots, rectangular panels filled with angular interlace, crosses, boxed 'X' motifs and radials (Figure 10.7). According to Shee Twohig (2004, 228), the carvings could date to the Early Medieval period, or the 15th century, or the 19th century. However, Ó Gallachair (1957, 111) noted that one of the caves was known locally to have been a Penal Mass site and the date '1777' was inscribed on the cave wall. It is likely, therefore, that the carvings relate to the celebration of Mass, though other possibilities and dates cannot be discounted.

Caves located adjacent to an outdoor Penal Mass site also acted as convenient hiding places for a priest or congregation if there was a threat of English soldiers approaching. One such example is recorded at Carntullagh, Co. Leitrim (Moore 2003, 196–7). Sometimes a group

of celebrants did not successfully evade surprise encounters. At Red House Cave on the coast at Clogherhead, Co. Louth the priest and his congregation are said to have been massacred (www.clogherhead.com). A red iron ore deposit in Priest's Cave, Cong, Co. Mayo was believed to represent the blood of a priest who was murdered there in Penal times (Quinn 1996, 222).

A first-hand eyewitness account penned in 1652 by Edmond Ludlow, Oliver Cromwell's commander-in-chief, describes a tragic event when he and his soldiers came upon a group of Catholics celebrating Mass at Aphuca Cave, Co. Monaghan (Figure 10.8). His description of what followed is worth repeating in full, so rare are such accounts from this period in relation to caves:

'I found a party of the enemy retired within a hollow rock, which was discovered by one of ours, who saw five or six of them standing before a narrow passage at the mouth of the cave. The rock was so thick that we thought it impossible to dig it down upon them and therefore resolved to try to reduce them by smoak. After some of our men had spent most part of the day endeavouring to smother those within by fire placed at the mouth of the cave, they withdrew the fire, and the next morning, supposing the Irish to be incapable of resistance by the smoak, some of them, with a candle before them, crawled into the rock. One of the enemy, who lay in the middle of the entrance, fired his pistol and shot the first of our men in the head, by whose loss, we found that the smoak had not the desired effect. But seeing no other way to reduce them, I caused the trial to be repeated, and upon examination found that, tho' a great smoak went into the cavity of the rock, yet it came out again at other crevices; upon which I ordered those places to be closely stopped, and another smoak made. About an hour and a half after this, one of them was heard to groan very strongly and afterwards more weakly, whereby we presumed that the work was done. Yet the fire was continued till about midnight and then taken away, that the place might be cool enough for ours to enter the next morning. At which time some went in armed with back, breast, and head piece to prevent such another accident as fell out of their first attempt. But they had not gone above six yards before they found the man that had been heard to groan, who was the same that had killed one of our men with his pistol, and who was resolved not to quit his post, had been, upon the stopping of the holes or the rock, choaked (sic) by the smoak. Our soldiers put a rope about his neck and drew him out. The passage being cleared, they entered and having put about fifteen to the sword, brought four or five out alive with the priest's robes, a crucifix, chalice, and other furniture of that kind. Those within preserved themselves by laying their heads close to a water that ran through the rock. We found two rooms in the place, one of which was large enough to turn a pike; and having filled the mouth of it with large stones, we quitted it and marched to Castleblayney' (Ó Gallachair 1957, 103-4).

DESPITE THE BEST EXERTIONS OF A WATCHFUL BAND

The isolated nature of many caves made them ideal places in which to conduct illegal or clandestine activities. In the early 19th century a cave at Corlea, Co. Leitrim was used for the illicit production of *poitín*

(a drink with a very high alcoholic content) (Mines 1956, 60). *Poitín* was also illegally distilled in Sheepfold Cave, Co. Leitrim; in a cave on Owey Island, Co. Donegal; and in the aptly named Whiskey Holes, Co. Fermanagh (*ibid.*, Ní Chaoimh 2010; Jones *et al.* 1997, 105). Pollnagollum/Coolarkan Cave, Co. Fermanagh contains an old churn that was supposedly used in distilling operations (Peter Barry pers. comm.). Nanny's Cave at Red Bay, Co. Antrim was home to an elderly woman named Nancy (or Ann) Murray who made an income from knitting, spinning and selling *poitín*. She died at the age of 100 in 1847 (Coyne and Bartlett 1842, 36; McConkey 2012, 192). Referring to other caves along the Antrim coast, Wright *et al.* (1831, 69) recorded that in the early 19th century 'quantities of a spirit-stirring liquor are manufactured in these dreary abodes, contrary to, and in despite of, the best exertions of a watchful band'. Well Cave (or Water Cave) at Ballintoy, Co. Antrim was known in recent years as a place where *poitín* was made (Danny Morgan pers. comm.). Sea caves also facilitated smuggling operations. The O'Sullivan clan reputedly stashed smuggled wine, brandy and lace in caves along the seashore at Reencaragh, Co. Kerry (Hickson 1872, 168). A 19th century tradition claimed that sea caves at Dunmore East, Co. Waterford had been used by smugglers to hide contraband (Coyne and Bartlett 1842, 61). Illegal imports such as French wine were concealed in Smuggler's Cave on the Antrim coast. Shots were fired from the cave to keep the coastal patrol at a distance (Bertie McKay pers. comm.). Alcohol and tobacco smuggling operations on Rathlin Island similarly involved the use of caves, and a drystone wall inside Bruce's Cave may have been built by smugglers who used it as a hiding place (Mc-Conkey 2012, 191, 193). Caves at Clogherhead, Co. Louth were said to have been the hiding place of smugglers who lived in the area (MacCooey 1930, 182).



*Figure 10.8 The two entrance openings into Aphuca Cave, Co. Monaghan
(Photo Alasdair Kennedy)*

Criminals also used caves as hideaways. Highwayman John (or William) Crotty used Crotty's Cave, Co. Waterford as a hideout before he was executed in 1742, while Caher Roe's Den, Co. Wexford is said to have been named after a thief or outlaw who lived there (Penney 1985, 50; MacNeill 1982, 567–8). Donnellaroska's Cave, Co. Cork was hiding place of the outlaw Dónal O'Keefe (Figure 10.9), and criminal Maurice Conway reputedly used Carrigmurrish Cave, Co. Waterford as his den (Coleman 1965, 26; Ussher 1886, 362). In 1830 and 1831 murderer Cornelius Sullivan Rabach hid from police in a small cave at Cummeengeera, Co. Kerry (O'Shea 1982, 50). *Uamhain Ghrióra* – a cave on Inis Meáin, Co. Galway – supposedly sheltered a man guilty of patricide. The story provided the inspiration for John M. Synge's famous play of 1907, *The Playboy of the Western World* (Mullan 2003, 244). An 'army deserter' hid out in Whiskey Holes, Co. Fermanagh (Jones *et al.* 1997, 105).

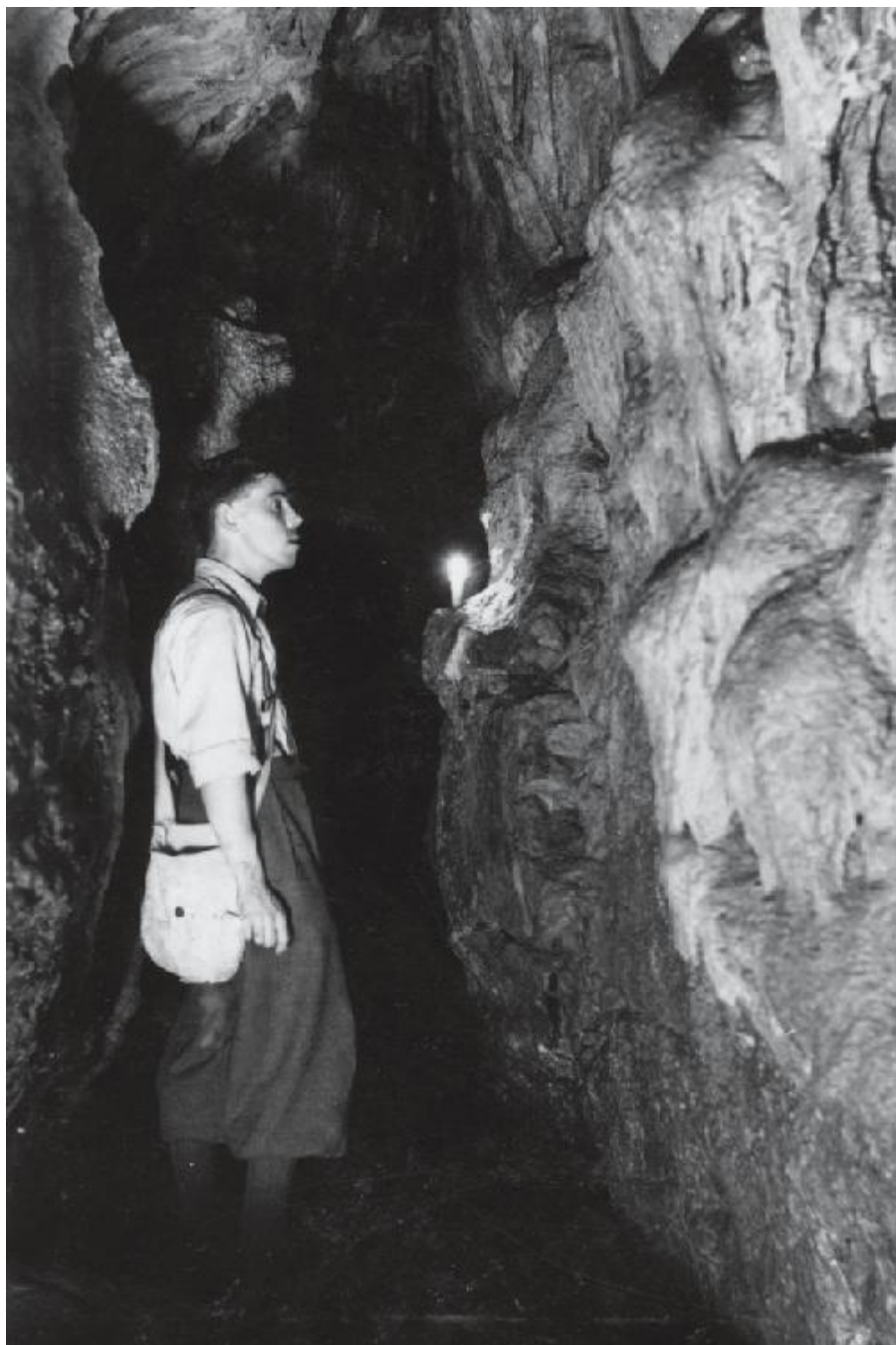


Figure 10.9 Caver Jack Coleman exploring Donnellaroska's Cave, Co. Cork in 1940 (Reproduced by permission of the SUI)

Other caves are likely to have been inhabited by those who were impoverished or on the margins of society. Gillie's Hole, Co.

Fermanagh was apparently named after a ‘hapless pair of ejected lovers’ who lived there for several months in the 18th century (Jones *et al.* 1997, 22). Similarly, caves on *Inis Mór*, Co. Galway were temporarily occupied during an outbreak of cholera in 1832 (Robinson 2009, 103). On the Ordnance Survey Maps of the 1830s, Cave E at Kesh is annotated *Hermit’s Bedroom*. Hardman (1892, 376) explained that a hermit resided there in solitude ‘some years ago’ but was trapped in the cave during a snow storm and died from hunger and exposure.

CONVENIENT CAVITIES

As enclosed sheltered spaces, caves have the potential to fulfil many different practical functions – they are effectively ‘convenient cavities’ (Tolan-Smith and Bonsall 1997, 218). In many instances activities leave no physical remains and thus the historical records are important because they suggest ways in which caves may also have been appropriated in prehistoric and early historic times: the absence of material culture does not mean that a cave was never used. The variety of activities that have taken place in caves in recent times is revealing. A blacksmith had a forge inside one of the caves at Killavullen, Co. Cork, probably Killavullen Cave 3 as the roof is partially covered in a sooty deposit (Crofton Croker 1824, 139; Burke 1991, 106). Coyne, and Bartlett (1842, 36) noted a sea cave at Red Bay, Co. Antrim that had been adapted as a smith’s forge and another sea cave that had been used as a school. Thackeray (1911, 413) commented in 1842 that this same forge was ‘blazing in the dark’. Other caves at Red Bay were used as a cow byre, a powder magazine, and stores for contraband and fishing equipment (McConkey 2012, 192). A cave known as The Lady’s Buttery in Co. Mayo is said to have been used for making and storing butter. Cement was stored in Polish Cave on the Antrim coast in recent decades while a breakwater was being constructed, and a local man parked his truck in the cave for a time (Danny Morgan pers. comm.).

The association between caves and fishing activities is particularly pronounced along the Antrim coast where sea caves are plentiful. Four caves at Oweyberne on Rathlin Island were used by fishermen to store equipment and for intermittent occupation (Figure 10.10). Entrance walls and partition walls were constructed in three of the caves, hearths and food remains were also encountered. In the largest cave crude wooden shelving, a bed, cooking utensils and modern debris indicate occupation by fishermen in recent years. Clay pipe stems suggest similar but earlier activities (Moore and Forsythe 2004; McConkey 2012, 198–205). A Robert Welch photograph from the end of the 19th century shows a fisherman from the Antrim mainland

baiting long lines with fish, starfish and shellfish in one of the Rathlin caves (Forsythe 2012, 216). Other caves on Rathlin were used in recent decades by fishermen from the mainland for overnight stays and to store fishing equipment. The evidence survives in the form of lobster pots, ropes, netting, boat nails, timbers and debris. Designated cooking and sitting areas have been identified at these sites (*ibid.*, 216). At Oweydoo Cave, recent successive periods of occupation were indicated by crude walling, hearths, animal bones, seashells, plastic debris, modern nails, and modern glass and ceramics. From the 18th to early 20th century, kelp burning took place near the cave during which time it may have served as a convenient shelter (McConkey 2012, 191, 205–8). In living memory fishing creels were manufactured and boats were repaired in Polish Cave at Ballintoy. Fishermen travelling from Ballintoy to Rathlin Island took shelter in caves on the island while on overnight stays (Danny Morgan pers. comm.).

Caves have also provided opportunities for financial gain. An account from 1833 described seal-hunting at Polleen Cave on the Bantry coast, Co. Cork. A man regularly visited the cave where he would bludgeon seals – up to five on a single occasion – and in this manner had ‘saved a considerable sum of money’ by killing the animals and presumably selling the meat and by-products (Grose 1833, 390). On Inis Mór, Co. Galway seabirds were hunted in caves by ‘cliffmen’. The birds were eaten, their flesh provided oil for lamps, and feathers were sold at market or used to fill pillows and mattresses. On one occasion in 1929 a well-known cliffman, Mícheál Ó Maolláin, caught ‘eight score’ guillemots (160 birds) and two rock doves in the cave of *Poll Dubh* ‘handing them out one by one to his companion who wrung their necks’ (Robinson 1990, 49–50).



Figure 10.10 Oweyberne Cave 3, Co. Antrim during archaeological excavations in 2004. Note the fishing equipment that had to be moved to the sides of the cave prior to the commencement of work (Photo Wes Forsythe)

In 1935 an English caving group reported that local farmers used a cave at Oughtdarra, Co. Clare as a shelter for lambs, and some decades later this or an adjacent cave was used as a cattle shelter (Pick and Bartlett 1936, 66; Tratman 1969, 207). Local tradition claims that a man kept a cow in Scollan's Cave, Co. Fermanagh 'about 100 years ago' (NISM file) while Lake Cave, Co. Cork was used in the 1980s as a stable for horses (Jones 1988, 22). A water-filled cave at Ballynameelagh, Co. Waterford served as a well for drawing water within living memory (Figure 10.11). Access was facilitated by a series of rock-cut steps which led from the ground surface down into the cave (Parkes *et al.* 2013, 31). Sheepskin Cave, Co. Donegal served a similar purpose during a particularly dry summer in the 1870s (Hamilton 1950, 84). Chapel Cave, Co. Sligo is currently used by the landowner to store farmyard equipment and debris. An ongoing issue is illegal dumping in caves and numerous examples have been highlighted in recent years (e.g. Parkes *et al.* 2013, 36). Fly-tipping not only affects ground water and animal activities but it was may also conceal, disturb and damage archaeological material and strata.



*Figure 10.11 Cave used as a well at Ballynameelagh, Co. Waterford
(Photo Thorsten Kahlert)*

An aspect of archaeology not often considered is fun, yet recent evidence indicates that caves can be places where people meet socially; this is also likely to have been the case in the past. Several cavers have told me about a 40th birthday party which they attended that was celebrated in Glencurran Cave, Co. Clare in the 1980s. A group of musicians played inside the cave while people ate, drank, smoked, sang and chatted. Straw brought into the cave was used as bedding by party-goers who slept there overnight. During our archaeological excavations at Glencurran in 2004, we recovered some straw and modern coins that are probably the only surviving physical evidence of this party. A 50th birthday party was also held in a cave on Knocknashee Mountain, Co. Sligo in the 1990s. The regular presence of beer cans in caves points to groups or individuals going to caves to consume alcohol, in many instances probably teenagers who are deliberately seeking out isolated places away from parents and the Gardaí. Various people have told me that as teenagers they congregated at a secluded cave near my home at Dromahair, Co. Leitrim. This was a place for adolescent gatherings a distance from their family homes where they could freely chat, smoke, consume alcohol and pursue romantic liaisons. I am also aware of adults having had sex in caves if a couple found themselves underground alone, or because of the secrecy that caves afford, or if a cave was perceived as a special or erotic place.

CAVE FOLKLORE

Folklore provides important insights into how people in recent centuries made sense of their surroundings. Many folktales are probably centuries old but were only recorded from the end of the 18th century: at first by antiquarians and visitors to Ireland (principally English or Anglo-Irish), but later by folklore collectors (primarily Irish), particularly in the 1930s. Following the destruction of the Gaelic social order in the early 17th century, the predominantly Gaelic population had no literary tradition only an oral recollection of such. Thus narrative tradition was the dominant form by which folktales were transmitted up to the mid 19th century (Champion and Cooney 1999, 204). Storytelling was the domain of the *seanchaí* (story-teller) and was an important element of *bothántaíocht* – a rural tradition where people congregated at a particular house for a night's entertainment. Storytelling was a central aspect of popular culture and was essentially the oral literature of the largely illiterate farming population (Ó Giolláin 2000, 33). Folktales were unaffected by contemporaneous literary tradition whereas many stories contained in Medieval and post-Medieval manuscripts are likely to have derived from narratives that were in oral circulation at the time.

The themes represented in folktales about caves mirror those that were prevalent in Medieval mythology: caves were Otherworldly places inhabited by supernatural omnipotent women and terrifying animals. The stories convey the rich cultural significance of many caves, a significance that does not have a physical manifestation or an archaeological signature. Certain caves were active places in the landscape, places brought alive by their association with supernatural personages and events. As discussed in Chapter 9, the separation between archaeology and mythology or between archaeology and folklore in academia serves only to diminish the biographies of particular monuments and topographical features. Efforts to redress such one-dimensional approaches are to be welcomed (e.g. Gazin-Schwartz and Holtorf 1999; Champion and Cooney 1999; Waddell 2014). The distinction between folklore and archaeology is also maintained in law. At present caves that are important from a folkloric perspective are not covered by Irish heritage legislation, whereas caves of archaeological significance *are* protected. In contrast, in Norway statutory protection is granted to locations with attached folk beliefs and traditions even though there may be no visible trace of human activities at such places (Holm 1999, 226).

NAMING THE UNDERGROUND

In recent centuries it was common to name caves – with associated narratives to explain the meaning behind the name (see also Chapter

1). Some swallowholes, for instance, were known as *Poll Tighe Liabháin* (a synonym for hell) because of the belief that they were entrances into the Otherworld (MacNeill 1971/3). A cave (or souterrain) in the Burren, Co. Clare has been known as *Ceartha Loinn Mhic Liamhtha* (the forge of Lon Mac Liamhtha) since at least the early 19th century, so-called because of the tradition that Lon, master-smith of the *sídh*, had his smithy inside the cave. Lon once challenged the Fianna to a race that terminated inside the cave (O'Flanagan 1839, 71–3). A version of this story appeared in the 17th century manuscript *Duanaire Finn* placing Lon and the adventure at the Kesh Caves, Co. Sligo (Chapter 9). This is one of many examples of the longevity of stories that circulated in oral tradition, as well as the various incarnations and natural reworkings of a particular tale.

Caves were also known by different names at different times. A pothole near Boho, Co. Fermanagh was known in the early 19th century as Sumera – an anglicisation of *súmaire* (swallowhole). In 1826 Dominic Noone – a member of the nationalist agrarian reform group the Ribbonmen – was murdered because he had turned informer and was thrown into the pothole. His body was subsequently retrieved from a rock ledge inside the cave by the police and magistrates. Thereafter the site became known as Noon's Hole (Jones *et al.* 1997, 26). A ballad composed in 1879 about the event contains the lines: *Within the mountain nature made / A deep and dismal cave / That suited well the murderers said, / To be a traitor's grave* (Miller *et al.* 2009, 16).

The naming of *Uaimh na Caorach Glaise* (the Cave of the Grey Sheep), Co. Tipperary followed from the story of a beautiful supernatural woman who sometimes emerged from the cave (Figure 10.12). A local farmer made several attempts to kidnap her and finally succeeded but she placed a *geis* on him not to touch her until she had eaten three meals of newly harvested food. While he was reaping the harvest she ate a grain of wheat and a second grain the following day. On the third day she ran into the cave and sent the farmer a grey sheep in her stead. The sheep gave birth to nine lambs but when the farmer tried to kill the ewe, the entire flock ran away. He was told that if he had slept with the woman before she had eaten three meals she would have stayed with him (MacNeill 1982, 120–1, 570). A different folktale explains that *Uaimh na Caorach Glaise* was named after an old sheep that was about to be slaughtered for a wedding feast but disappeared into the cave bringing misfortune to the farmer (MacNeill 1989, 118). With the decline of spoken Irish the significance of the original name of this cave is all but lost. It has also been known as Desmond Cave, the Old Cave, Old Desmond Cave and Mitchelstown Old Cave (Barry 2013).

REALM OF THE SUPERNATURAL

Irish folklore indicates that caves were considered places of the 'other', places outside the realm of normal every-day life, and places that elicited great fear and apprehension. Caves were one of the typical abodes of the *sídh*. Oisín reputedly spent 300 years in *Uaimh na Caorach Glaise* with a woman of the *sídh* (MacNeill 1989, 119). The *sídh* who lived in Knockfeerina Hill, Co. Limerick entered and exited their abode via *Poll na Bruidhne* (hole of the fairy palace or mound) swallowhole. If a stone or ball of thread were thrown into the cave the *sídh* would throw it out again; if covered with blood, this foretold the death of the individual involved (Ó Danachair 1947, 224–5). Another sign of impending doom was when a headless horseman emerged on a coach from Cloyne Cave, Co. Cork visiting houses in the village where a death was imminent (Maberly 1910, 45). A *púca* (ghost) lived in a cave in Co. Kilkenny assuming 'the strange shape of an enormous fleece of wool, and issuing from the cavern, rolls over the ground with astonishing speed, uttering a mysterious buzzing sound which inspires terror in all who hear it' (Wood-Martin 1902, 55). Of a more helpful disposition, the leprechaun who lived in a cave known as *Muilleann Luprachain* (the leprechaun's mill), Co. Mayo would grind corn left by humans at the cave each night (Quinn 1996, 261). The supernatural *gruagach*, a long-haired male fairy, is said to have lived in Well Cave (or Water Cave), Co. Antrim (Danny Morgan pers. comm.).



Figure 10.12 *Uaimh na Caorach Glaise*, Co. Tipperary (Illustration *Dómhnaíl Bric*)

Several folktales tell of supernatural cave-dwelling animals that often bring misfortune to the local population and landscape. A folktale recorded in 1736 about the Cave of the Wild Horses, Co. Clare explained that a herd of wild horses emerged from the cave ‘in flood time’ ravaging all the corn in the area (Figure 3.4). An enchanted talking bird was once caught there and floods containing dead fish issued from the cave (O’Flanagan 1839, 237; Westropp 1900, 421). When this cave floods, water becomes trapped in cavities in the roof creating loud booming noises – a phenomenon that may have influenced the folktale (Peter Barry pers. comm.). A supernatural badger of the *sídh* lived in *Poll na brocaigh* (hole of the badger), Co. Clare; he was eventually killed by St. Maccreehy (Westropp 1894, 31; 1900, 419). An ‘English diver’ was sent to investigate the loss of cattle in Pulty (or Polticoghlan) swallowhole, Co. Leitrim but emerged from the cave to relate that a horrible serpent with large burning eyes had chased him. The man died within a matter of minutes (MacNeill 1982, 515). For satirising the cats of Ireland, chief bard Senchan Torphéist was abducted by Irúsán, the king of the cats, who lived in a cave near Clonmacnoise, Co. Offaly (Wilde 1888, 159–62). A folktale recorded

in 1779 tells of a calf that dragged a woman who was holding onto its tail into the Cave of Crúachain. They both later emerged from the Kesh Caves. The passage between the two caves was subsequently blocked up by the devil (Wilde 1870/1, 136, 247; Wood-Martin 1902, 50).

A WOMAN'S PLACE

In 19th and 20th century folk tradition it is exclusively men who seek refuge in caves during times of political turmoil, and exclusively male saints who retreated to caves for closer communion with God. These men are presented as historical and mortal figures (though this may not be the case in reality). In contrast, folktales told over the same period reveal that the overtly supernatural beings that inhabit caves are female – an association present from at least Medieval times (see Chapter 9). Unlike their male counterparts, these supernatural females are not recluses or refugees but are powerful individuals who chose to dwell solitarily in caves. In Scottish stories the most usual danger to be encountered in caves is also ‘a feminine creature of somewhat shadowy attributes’ (Melia 1967, 369). This possibly reflects the common (Irish) origins of the mythological and folk traditions of both countries. The mortal men who feature in the Irish folktales – usually opponents or victims of females – are fearful of encounters with the feminine supernatural and of the dangers posed by caves, including death or the threat of never returning to the outside, human world. There is often a combat between supernatural female and mortal male. In situations where she is not victorious, the male rarely emerges as a hero, rather, he is fortunate to escape with his life. He never exacts revenge, he rarely kills his female opponent (unless he is a saint), and the interaction frequently brings him close to death.

The women who lived in caves varied from hags to seductresses to victims of kidnapping. The most prevalent is the hag – either the *Caorthannach* (the devil’s mother), the *Cailleach Bhéarra* (the hag of the Beara Peninsula), or the *bean sídh* (banshee). The hag may be an incarnation of the sovereignty goddess of Medieval mythology. Her aged and ugly appearance may reflect a degree of Christianisation or vilification of the Medieval goddess whose sexuality and sexual prowess was a dominant feature, or it may symbolise the increased subordination of women and female sexuality by the Catholic church. A fitting metaphor is the story of how St. Patrick enticed the *Caorthannach* out of her cave and chased her for three days until he eventually killed her (MacNeill 1982, 531).

Both the *Cailleach Bhéarra* and the *bean sídh* are wise sinister old women who are closely associated with death and are usually hostile towards the human world (Ó Cruaíaoich 1988, 2003; Lysaght 1986).

In the folklore of a modern traveller community, Badhbh's Hole (Ballynamuck Cave 1), Co. Waterford is said to be home to the *bean sídh*. A local traveller community are reluctant to enter the cave and were uneasy about archaeological excavations that took place there in 2004 (Cóilín Ó Drisceoil pers. comm.). *Seantuinne* (old woman or female elder) is the earliest epithet by which the *Cailleach Bhéarra* is known in literature and a number of caves, particularly coastal, have been named *Seantuinne* including a swallowhole in Lismuinga West, Co. Clare and several swallowholes along the north Mayo coast (MacNeill 1971/3, 207; Ó Cruaí 2003, 87–91). The *Cailleach Bhéarra* is frequently connected to prehistoric monuments, particularly standing stones and megalithic tombs (Champion and Cooney 1999, 200), and thus it is interesting that she is also linked to caves. A folktale from Co. Cork explains that the *Cailleach Bhéarra* was buried at Labbacallee wedge tomb while her sister lived in a cave in the nearby Ballyhooley Mountains (NFC, UCD).

A *cailleach* also lived in a cave at *Gleann na mBiorach*, Co. Kerry. She had been responsible for the devastation that had caused all the cattle of Ireland to die. After she was killed, a table covered with gold and money was found inside the cave (De hÍde 1929, 258–66). Another story from Kerry tells of a local hag, *Cailleach Dhuibhneach*, and a hag from Leinster, *Cailleach Laighneach*, who lived in a cave known as *Cró na Caillighe* (the hag's enclosure) on Gowlin Hill (MacNeill 1982, 207–8, 573). Mary Ann's Cave, Co. Sligo was residence to a hag who lured two sisters into the cave (Dixon 1973, 33). The 'old witch' who lived in another Sligo cave – *Uaim na gCailine* (the cave of the *cailleach*) – killed children who had not been to Easter Sunday Mass (NFC, UCD). This prohibitive folktale served to deter children from entering a dangerous place but it could also be read as presenting the opposition between Catholicism and the non-Christian overtones of the hag.

Frequently, encounters with a mortal male or the outside world are rejected by the cave-dwelling female. The woman who lived in Pollnagollum Cave, Co. Mayo was a shape shifter and generally assumed the form of a trout. When 'an enemy' or 'an English yeoman' attempted to cook the fish and touched it with his sword, it transformed into a beautiful woman who subsequently disappeared (Logan 1980, 122). A variant theme is the story of a king who hid his nine (or seven) daughters in a series of coastal caves known as the Cave of the Nine (or Seven) Sisters at Ballybunnion, Co. Kerry to protect them from 'the Northern sea-king' but they appear to have met their death in the cave. Another version tells of seven girls who fell in love with seven sailors who were 'enemies of Ireland' which resulted in an equally tragic outcome (Thiselton-Dyer 1905, 201–2). Of a similar romantic thrust is the story of Sybil Lynch of Galway who

eloped with one of the Feirtéar family from the Dingle Peninsula, Co. Kerry. When her father came looking for her she sought refuge in a cave beneath the Feirtéar castle but was drowned by the incoming tide (Barrington 1999, 244). A mid-19th century folktale recounted that a chieftain found a beautiful woman asleep in Vigo Cave, Co. Clare. She agreed to marry him provided that he never allowed a member of the O'Brien family to enter his castle at Inchiquin. The following year, one of the O'Briens attended a feast to celebrate the birth of a son to the woman from Vigo Cave. She leapt out of the window with the baby and disappeared into Lough Inchiquin (Hobbs and Nicholson 1963, 70).

Folktales which tell of a woman held captive in a cave mirror the abduction of the goddess Persephone (daughter of Zeus) by her uncle Hades, the Greek god of the underworld, and thus may reflect a borrowing from Classical mythology. Hades forced his niece to spend the winter months with him underground. As with Persephone, the captured woman of Irish folklore may fail or die. There is sometimes a suggestion of a violent encounter or rape. The captor is often Donn, god of death and the underworld, who bears characteristics of Zeus (who was born in a cave) as well as the Egyptian Osiris, yet another god of the underworld. *Poll na Bruidhne* on Knockfeerina Hill, Co. Limerick was considered a dwelling place of Donn. At a *sídh* wedding Donn kidnapped the bride and took her into this cave (Ó Danachair 1947, 225). In another folktale a woman came to *Poll na Bruidhne* calling loudly for her dead daughter whom Donn had kidnapped (Müller-Lisowski 1948, 157). A story associated with Meelin's Rock, Co. Cork related that on her wedding day a bride was kidnapped by a dark stranger and carried into his cave (MacNeill 1982, 567). Donn also guards a cave at the mouth of a river in Ballyquin, Co. Kerry which acts as an entry point to the Otherworld (Séan Ó Dubhda pers. comm.). A folktale echoing this theme tells that the 'dark spirit' of a king resides in a cave in the hills near Lough Inchiquin, Co. Clare. Once every seven years, at midnight, he emerges from the cave on a white horse and they race around the lake at great speed (Hobbs and Nicholson 1963, 70).

In a variant of the kidnapping theme, Aoibhil, a woman of the *sídh*, was banished to a cave at Castlecor, Co. Cork by her sister Clíodhna, queen of the *sídh* of south Munster, because of a dispute over the love of a handsome prince. Aoibhil was transformed into a white cat and spent her life guarding treasures in the cave (Franklin 1897, 81–93). A folktale from Cong, Co. Mayo explains the naming of a cave known as Webb's Hole. Webb was a landlord who 'was accustomed to ravish women, married or unmarried, young and old' and would then take them to the cave and kill them. Eventually one woman hurled Webb

into the chasm where he perished (Quinn 1996, 260–1). A sump called Margaret’s Hole in the Pullauns, Co. Donegal was named after a woman who fell into the cave and died one night when she and her husband were coming home from a fair (Hamilton 1950, 85). Other women were more fortunate. A cave known as *Poll Cháit* in Co. Cork is named after a woman who went to the well by night but slipped and fell into the swallowhole. She was rescued the following day by a rope made of hair (Cremin 1995, 24).

THE CASE OF THE DISAPPEARING PIPER

A theme common to Irish, Scottish, Welsh and English folklore is that of a male musician who disappears into a cave (Melia 1967; MacNeill 1989). In Irish folktales the musician is usually a piper who is never seen again, though afterwards his music can occasionally be heard aboveground. A story recorded in 1890 related that a piper who went into a cave on the island of Inis Meáin, Co. Galway was never seen again. Another man subsequently followed a rabbit into this cave and heard music which reminded him of the piper. When he turned round he found a rabbit playing a flute (*ibid.*, 124). A shepherd playing bagpipes got lost in *Uaimh na Caorach Glaise* but the music of his pipes can be heard every May morning since (*ibid.*, 118–9). A fiddler once went into Tory Hole, Co. Cavan to play music but never reappeared as he enjoyed too much the company of the *sídh* who lived there. Dancing and music can still be heard issuing from the cave (Melia 1967, 369). The fiddler who went astray in Fiddler’s Cave, Co. Fermanagh was never seen again but those outside continue to hear his music (Fogg and Fogg 2001, 113). More fortunate was the trumpeter who got lost in Cloyne Cave or Carrigacrumph Cave, Co. Cork. By playing his bugle he alerted quarrymen to his predicament and was rescued (Crofton Croker 1824, 253). In his cave of *Poll na Bruidhne* – also known as The Piper’s Hole – Donn conferred the gift of music upon a harpist but later withdrew it and carried the musician into his cave (MacNeill 1989, 117). A cave in the Pullauns, Co. Donegal includes a section named Piper’s Hole in reference to a piper who disappeared there ‘several hundred years ago’. Local people made a connection between this story and a human skeleton that was discovered in the cave in 1929 (Hamilton 1950, 84).

POPULAR RELIGIOUS PRACTICES

The distinction between official and unofficial religion was a product of the late 17th and 18th century Enlightenment (Brown 1981). Prior to this, popular religious practices co-existed amicably with formal Roman Catholic Church doctrine; indeed local clergy often legitimised

and contributed to popular practices (Carroll 1995, 360–1). However, from the early 19th century onwards the Church became increasingly hostile in its opposition to behaviour that was considered pagan and superstitious. Efforts at suppression were not altogether successful and many popular religious activities became assimilated into mainstream Catholicism. Two types of popular religious practices – visitations to holy wells and Lughnasa assemblies – occasionally incorporated caves. At least seven cave-holy well complexes and six caves that formed the foci of Lughnasa assemblies are known at present.

When the veneration of holy wells began is a contested question. Some have suggested an Iron Age origin (Kelly 2002, 25–6); others argue for an Early Medieval date (O’Sullivan and Sheehan 1996, 336); while Carroll (1999, 17–8) believes the tradition only emerged after 1500, possibly developed by Anglo-Irish and Gaelic-Irish elites in the 16th and 17th centuries. In the case of the seven cave-holy well complexes, traditions of their religious significance were recorded in the 18th and 19th centuries but in many instances their proximity to Medieval ecclesiastical foundations suggests potentially earlier origins. For example, both Catsby Cave, Co. Donegal (Figure 10.13) and Fiddler’s Cave, Co. Fermanagh are associated with Cistercian abbeys.

At the seven complexes in question, the holy well is located either inside or beside a particular cave. The wells could be visited at any time of year but the most important day for devotions was the *pátrún* day – a rural gathering and parish celebration normally held on the feast day of the local patron saint. Religious devotions (rounds) were conducted at the holy well which involved moving clockwise around the site reciting a prescribed set of prayers at a sequence of fixed stations (Carroll 1999, 30). Objects were left at the well including pebbles, coins and personal mementos, while rags and ribbons were tied around a holy tree (*bile*) if present. The *pátrún* at a cave known as the Wee House of Malin, Co. Donegal took place on the 15th of August. Pilgrims bathed in the holy well and spent time in the cave praying (Ó Muirgheasa 1936, 160). The *pátrún* incorporating St. Moling’s Cave, Co. Kilkenny was held on the first Sunday after the 24th of August, during which people knelt on a flat stone inside the cave and prayed (MacNeill 1982, 232). An important aspect of any *pátrún* was to drink water from the holy well which was considered sacred and usually believed to possess curative properties. Water from the holy well in Bracken’s Cave, Co. Antrim provided a cure for warts (Figure 10.14) (McConkey 2012, 195) while the holy well beside Fiddler’s Cave was known as *Tobar na Súil* (well of the eyes) due to its healing properties for illnesses of the eyes.

The majority of cave-holy well complexes are situated at isolated and liminal places in the landscape, on physical and symbolic

boundaries. The sense of boundary is particularly heightened where the sites are located on the coastlines of islands such as St. Leo's Cave on Inishark Island, Co. Galway and Bracken's Cave on Rathlin Island. Two other cave-holy well complexes are also coastal: Chink Well, Co. Dublin and the Wee House of Malin. The wells associated with the two latter sites are covered by the sea at high tide which prohibits access at certain times of the day, reinforcing the sense that these were places apart belonging neither to land nor to sea. Chink Well is located inside a cave which is inundated by the sea each day. The fact that the well only ever contained fresh water was believed to be an indication of its sanctity, though it did not have an associated *pátrún* or patron saint. Tradition stipulated that pilgrims had to enter the cave and leave a piece of bread at the holy well. If the bread was washed out to sea at high tide, the person would be cured of whooping cough. For the cure to be effective the cave could only be visited before sunrise (Logan 1980; Corder 1946, 27). Here again is an emphasis on the liminal – a time of day that was betwixt and between, making the journey to the cave more hazardous yet more potent.

With the exception of Chink Well, all of the cave-holy well complexes are associated with male saints. According to folk tradition there was no water in Bracken's Cave for St. Brecán to drink but upon raising a stone, a holy well miraculously appeared. This same cave is also linked locally to St. Columcille (McConkey 2012, 194–6). St. Muirdhealach is said to have blessed the water in Malin Well located near the Wee House of Malin (Logan 1980, 160). St. Patrick lived in Catsby Cave and he knelt in prayer at Fiddler's Cave leaving the impression of his knees on a stone (Wakeman 1896, 294–5; MacNeill 1982, 123). St. Leo spent time in prayer and meditation in his cave on Inishark Island (Manning 2005, 109). These benign male saints, as well as other saints associated with caves in folk tradition (see Chapter 9), present a stark contrast to the supernatural terrifying women that inhabited other caverns.



Figure 10.13 The holy well inside Catsby Cave, Co. Donegal (Photo Marion Dowd)



Figure 10.14 Bracken's Cave, Co. Antrim (Photo Andy McInroy)

The demise of the *pátrún* as a result of church condemnation led to a parallel demise in the cultural and religious significance of relevant caves. In 1752 Bishop Pococke visited Malin Well and was horrified to find that ‘the Roman Catholics plunge in [to the holy well] with superstitious notions that the water received some virtue from the saint who lived in a cave in the rock of the cliff where poor people lodge who come for cure’ (Logan 1980, 26). A similar disapproving

account from 1814 claimed the gatherings had developed into 'discreditable orgies' which the Catholic church was attempting to abolish (Ó Muirghéasa 1936, 161). The *pátrún* at Mullinakill Hill involving a visit to St. Moling's Cave was suppressed by the Church in 1867 (MacNeill 1982, 232). The Glendalough pilgrimage, which included visiting two caves associated with St. Kevin (see Chapter 9), was suppressed by the church in 1862 due to the 'irreligious aspect of such mass expressions of popular piety'; namely rowdiness, drunkenness and faction fighting (Harbison 1991, 122).

CELEBRATING THE HARVEST FESTIVAL

In recent centuries caves have sometimes formed the foci of large scale gatherings where communities congregated to celebrate the harvest at the quarterly festival of Lughnasa. Though approximately 20% of the 195 recorded Lughnasa sites in Ireland have a Christian dimension, the festivals at the six recorded cave sites were non-religious in nature (MacNeill 1982). The first documentary reference to Lughnasa dates to the 9th century AD but there is a possibility that this festival originated in the Iron Age because it centres on the god Lugh, the equivalent of the Roman deity Mercury (see Chapter 7). Lugh is credited with initiating a festival to mark the beginning of harvest (*ibid.*, 3–10, 410). The gatherings at caves (as with most other Lughnasa sites) took place on either the last Sunday of July or the first Sunday of August. The day of the festival was sometimes named after the cave in question. The celebrations at the cave known as Tory Hole, Co. Cavan were held on the first Sunday of August which was known locally as Tory Hole Sunday. The sites were also frequently associated with supernatural creatures. For instance, a giant lived in a cave on Ardagh Hill, Co. Longford and posed a threat to children on the festival of Lughnasa when he was most active (*ibid.*, 571).

Lughnasa festivals were very large gatherings, in some instances attracting thousands of people. The cave assembly sites are all located on mountains and therefore the arduous journeys involved must have precluded the aged, the very young, and those in poor health. Activities on the day included picking bilberries, weight-lifting, music, dancing, courting, faction fighting and going into the particular cave. At Pulty, Co. Leitrim people from within a 3km radius congregated to throw stones into the swallowhole shouting *Imígt leat* – a curse synonymous with *Go to Hell!* At Benaughlin, Co. Fermanagh people climbed the mountain to 'admire the view, pick bilberries and visit caves' up until at least the 1940s (MacNeill 1982, 121, 177). The Kesh Caves was the largest and most important Lughnasa assembly in the whole of County Sligo. After the midday meal people climbed the hill to the caves while others continued to the summit and added a stone

to the passage tomb cairn located there (*ibid.*, 186–7). The assembly at a cave known as Caher Roe's Den was also a very large event attracting several thousand people. The cave is at a very liminal and potent place in the landscape, located as it is on the southern slopes of the Blackstairs Mountains at an altitude of 735m OD, and on the county boundary between Carlow and Wexford. After a meal of the first potatoes that had been dug that year, people climbed the mountain to search for stolen treasure in the cave (*ibid.*, 226, 590).

Most Lughnasa assemblies had died out by the end of the 20th century though in some cases deliberate attempts were made to revive and continue the gatherings, such as the community sports event held until 1986 at the foot of the Kesh Caves on the traditional Lughnasa date (Dowd 2005). Though Lughnasa assemblies were large-scale public gatherings where a variety of activities took place, they have left no aboveground archaeological trace. Once again, this emphasises the importance of folk tradition in terms of recording events of major significance in the annual calendar, events involving hundreds if not thousands of people. This contrasts with most of the prehistoric and Early Medieval evidence which generally seems to emphasise the secret nature of caves. Even if some prehistoric ceremonies were witnessed by the wider public, they are unlikely to ever have involved the volume of people that celebrated the harvest festival in recent centuries.

CAVES AND CATHOLICISM IN THE 21ST CENTURY: LOUGH DERG AND LOURDES

The close association between religious life and caves in prehistory is mirrored to an extent in modern Ireland. Caves have been incorporated into contemporary Christian practices and artificial caves have been deliberately constructed to fulfil specific devotional needs. According to recent censuses, approximately 4.6 million people on the island of Ireland – almost 75% of the overall population – describe themselves as Catholic (www.cso.ie; www.nisra.gov.uk). While the number of practicing Catholics is significantly less, and society is becoming increasingly secularised, the significance of caves in modern religious expression continues. Caves form the focus of two of the largest national and international places of Catholic pilgrimage in the 21st century: Lough Derg and Lourdes.

Harbison (1991, 55) stated that the Lough Derg pilgrimage is 'among the few surviving examples in Europe which give the present-day participant some idea of the true rigours experienced in going on pilgrimage in Medieval times'. The Lough Derg Centre currently offers pilgrims a choice between the traditional three-day retreat, a one-day retreat, and retreats that cater for youth groups and 'special groups'. The most common of these is the three-day retreat. Pilgrims fast for

three days except for an allowance of one 'meal' per day which consists of black tea or coffee, dry toast and oatcakes. The principal penitential exercise is a 24-hour vigil. Nowadays, stations are completed around the island, preferably barefoot, during which time the rosary and prayers are recited. The number of pilgrims visiting the island has varied from 4000 in 1770, to 3000 in the mid-19th century, and 15,000 in the 1970s (O'Connor 1931, 183; Turner and Turner 1978, 124, 132). Between 2001 and 2010 the average number of pilgrims making the three-day retreat reached 8831 per annum in addition to approximately 10,150 people who completed the one-day retreat (Prior Richard Mohan pers. comm.). Overall, close to 20,000 people go on pilgrimage to the island every year. What the 21st century pilgrim is largely unaware of, however, is that the pilgrimage originated as a consequence of the visions of heaven and hell that were experienced by a knight in a cave on the island during the 12th century (see Chapter 9). This is echoed, however, in the 24-hour vigil.

One of the largest Catholic pilgrimage destinations in Europe also developed around supernatural experiences that took place at a cave (*grotte*) in the Pyrenean village of Lourdes in the south of France. In the early 19th century local tradition claimed that the cave was inhabited by a malevolent supernatural being (Harris 1999, 53–4). At this time it was described as bearing 'unconscious associations with femininity' (*ibid.*, 84–5). Accounts written by men who travelled through the cave bore sexual undertones, such as the difficulty of 'penetrating' the secret and mysterious cavities and passages. Women who made the same excursions were criticised for being immoral and indecent (*ibid.*, 85). Later, in 1858, a teenage girl claimed she witnessed the first of 18 apparitions of the Immaculate Conception at the cave. Though local state and church authorities initially opposed the visions, the site captured the devotion of Catholics and by 1908 more than 1.5 million people congregated at the cave to commemorate the 50th anniversary of the apparitions. Almost five million pilgrims from around the world visited Lourdes every year during the 1990s (*ibid.*, 10). The apparitions have been 'potent enough to appeal to urban, educated Catholics around the world, to influence virtually all subsequent Marian apparitions, and to transform the veneration of the Virgin in contemporary Catholicism' (*ibid.*, 13). Pilgrimage to this cave continues to grow and while there is no figure for the numbers who depart Irish shores to visit Lourdes each year, an estimate in the region of 70,000 pilgrims has been postulated (*Irish Independent* 12/01/2008). Testimony to the continuing importance of Lourdes is apparent in the many shrines that dot the Irish landscape. Since the Marian Year of 1954, many villages have constructed their own artificial caves or grottoes replicating the *grotte* at Lourdes as an

expression of devotion to the Virgin Mary (Figure 10.15). Very often a stone is brought from Lourdes and deliberately incorporated into the grotto superstructure (Gabriel Cooney pers. comm.). Almost every village and town in Ireland has seen the construction of artificial caves to fulfil spiritual requirements and to honour the woman who is associated with them.



Figure 10.15 Grotto at Corofin, Co. Clare (Photo Marion Dowd)

ENDURING PLACES

This chapter has demonstrated the multiplicity of ways in which caves were used and perceived by people in Ireland in recent centuries continuing into the present day. Caves in rural parts of the country were recognised by farming communities, while island and coastal caves were frequently utilised by fishermen. Folklore reminds us that significant caves in the past were named places, central to community stories and local interpretations of landscape. Many caves evoked strong emotions because of their associations with real or supernatural events and persons. For instance, caves associated with terrifying goddesses evoked fear, while caves where people had died may have stirred grief. Modern activities in caves – such as sexual encounters or teenage drinking escapades – reflect how somewhat ‘underground’ activities are literally taken underground. In many instances the majority of modern activities in and around caves leave no

archaeological trace which is important to bear in mind when considering prehistoric and early historic evidence (or lack of) from caves.

A departure from agricultural and rural life in recent decades has led to a reduction in the interaction between caves and people. Many caves have been blocked up or forgotten, and most people rarely if ever go underground (except to show caves). This may be little more than yet another shift in the long history of how caves have been experienced and perceived. The past 10,000 years tell us that we have always been drawn to caves and to their darkness, silence and secrecy. There is little doubt but that this relationship will continue into the future. Part of the enduring appeal must be that the subterranean world is one which operates on its own terms, a world rich in meaning and metaphor, a world that will always be important yet remains elusive.

End Note

The Future of Irish Cave Archaeology

This book is the first dedicated examination of the relationship between people and caves on the island of Ireland spanning a period of 10,000 years. Caves have been interpreted, appropriated, integrated, perceived and reinvented in a multitude of different ways during that time. Throughout prehistory caves were closely linked to the religious dimension of life and were used primarily for burial, multi-phase funerary rituals, votive deposition and ritual retreat. With the exception of scanty Bronze Age finds, however, little evidence survives to suggest that prehistoric people inhabited caves. It seems the subterranean world was extremely potent and powerful and not an appropriate location in which to carry out profane activities. With the arrival of Christianity, caves came to fulfil a variety of domestic functions including occupation, storage and hideaway, though a religious dimension prevailed through associations with saints, pilgrimages and holy wells. From Early Medieval times onwards, mythology and folklore reveal caves as places of the Otherworld, supernatural loci in which omnipotent beings and animals reside, places that are best avoided.

Irish cave archaeology is a field of study still in its infancy and thus offers great research potential. As should be evident from this book, caves often provide insights into grey areas in archaeological research, be it Mesolithic mortuary practises or Medieval unenclosed settlement. Caves are by far the most likely place in which the first evidence for Palaeolithic human activities on this island will be discovered. There is much scope for integrating caves within broader archaeological landscapes on a local and regional level, by assessing how material from caves can shed light on the aboveground lives of past populations. The reexcavation of sites that were investigated prior to 1950, as well as targeted excavation of hitherto un-investigated caves, will undoubtedly prove rewarding. Predictive modelling can help isolate caves of archaeological significance by considering factors such as location, morphology and proximity to other archaeological monuments. The application of GIS to assess patterns in the

distribution of artefacts and bones from current and older excavations will highlight areas of activity within specific caves. Several important cave excavations by this author – such as Moneen Cave and Glencurran Cave – await full publication, and many of the antiquarian excavations deserve modern reassessment and dedicated publications, none more so than those in the Dungarvan Valley and along the Antrim coast.

Detailed zooarchaeological analysis of the faunal remains from caves, incorporating a comprehensive radiocarbon dating programme, is the largest outstanding piece of work related to Irish cave archaeology (a work in progress by Ruth Carden). Most of the artefact groupings from caves have received specialist analysis in recent years and await publication. However, iron artefacts have yet to be comprehensively studied to modern standards and can shed light on historic activities in caves. Finally, there can never be too many radiocarbon dates from caves. This is the best way of identifying different phases of activities at disturbed sites, particularly short-term activities that leave little physical trace (e.g. shelter and refuge).

Fascinating information can be gleaned from more detailed analyses of historical references, mythology, folklore and folk traditions. These fields of scholarship highlight the cultural significance of caves, particularly in cases where no material culture survives. A wealth of untapped data is contained in the National Folklore archives (UCD), the Ordnance Survey Letters and Ordnance Survey Name Books, local and parish journals, antiquarian records, magazines, newspapers and websites. The *Great Sea Caves of Antrim* project, a photographic study of sea caves along the Antrim coast, highlights the value of local studies: over 45 caves were visited and relevant cultural information was collated (McInroy 2009). There is enormous scope for further studies of this nature, particularly in rural and coastal regions and on off-shore islands where caves abound.

The approaches employed by this author in disentangling and making sense of the archaeological assemblages from Irish caves could potentially be adopted in karst landscapes elsewhere. Most other European studies that I am aware of tend to focus on particular periods of cave usage, or are selective in terms of the artefacts, sites or regions investigated, often with little uniformity in how caves are evaluated and studied. The projects that have been undertaken to address some of the issues and questions posed by the archaeological assemblages from Ireland's caves could be implemented to similar effect in parts of Europe where cave archaeology is still a neglected field of investigation.

Ultimately, we need to explore how the Irish evidence complements and contrasts with the archaeology of caves elsewhere in Europe.

These are exciting times for research in cave archaeology.

Appendix 1:

Caves of Archaeological Significance in Ireland

Column 1: Sites are organised alphabetically by county, townland and cave name.

Column 2: This lists the Northern Ireland Sites and Monuments Record (NISMR) number or, for the Republic of Ireland, the Sites and Monuments Record (SMR) number. At the time of writing, information relating to caves in the Republic of Ireland is consistent with the Archaeological Survey of Ireland records and website (<http://www.archaeology.ie/>).

Column 4: The cave names listed are those by which a site is currently most commonly known in the literature. Where second names are present, this is an older name or a local name. Caves visited by the author are indicated by +. In the case of destroyed sites, the former location was visited. A site that appears to have been destroyed – based either on written references or an inability to locate it in the field – is listed as *Destroyed*?

Column 5: Primary references direct the reader towards the main source which records the archaeological significance of a site. This is not a comprehensive bibliography. Where the archaeological importance of a cave is not published, the information may be referenced as a personal communication to the author. *Top. Files*, NMI refers to information contained in the unpublished Topographical Files held in the National Museum of Ireland.

Columns 6 and 7: Co-ordinates were sometimes obtained by GPS, but usually by using various editions of the Ordnance Survey Maps. While every care has been taken to obtain the correct ITM/NGR, slight errors may exist. If you have a more accurate GPS reading, please contact the author and this can be adjusted in future reprints. In all instances, the co-ordinates presented here are more accurate than those appearing in

previous publications or on-line sources.

County	NISMR or SMR no.	Townland	Cave name	Primary reference	ITM Reference (E,N)	Irish Grid Reference (E,N)
Antrim	ANT004:125	Ballintoy Demesne	Boat Cave (destroyed?) –	Jackson 1936a, 1938	705947, 945317	304017, 445336
Antrim	ANT004:126	Ballintoy Demesne	Boheeshane Bay Cave 2 (rock shelter E of Boat Cave)	Jackson 1936a	704210, 945311	304280, 445330
Antrim	MRA002:005	Ballintoy Demesne	Chimney Cave (destroyed?) –	Jackson 1936a	704077, 945229	304147, 445248
Antrim	ANT004:127	Ballintoy Demesne	Masked rock shelter (W of Potter's Cave)	Jackson 1934a	702906, 944899	302976, 444918
Antrim	ANT004:014	Ballintoy Demesne	Potter's Cave +	Jackson 1933a, 1934a, 1938	702934, 944919	303004, 444938
Antrim	MRA003:073	Ballygill South	Oweyberne Cave 3	McConkey 2012	710998, 950870	311070, 450890
Antrim	ANT001:050	Ballyroe	Bracken's Cave	McConkey 2012	715927, 950910	316000, 450930
Antrim	MRA001:037	Feigh alias Dunseverick	Dunseverick Cave	Logue 2008	698631, 944531	298700, 444550
Antrim	ANT020:065	Red Bay	Cushendall Cave (destroyed?)	Lloyd 1847:50	722925, 924985	323000, 425000
Antrim	ANT003:034	Templastragh	Portbraddan Cave +	May 1943	700483, 944382	300553, 444401
Antrim	MRA001:035	White Park	Park Cave +	Jackson 1933a	702835, 944820	302905, 444839
Clare	CL002:080----	Acres	Monkeen Cave or, The Hole in John Davoren's Wall	Dowd 2013a	525628, 705989	125661, 206956
Clare	CL005:228----	Aillwee	Maze Hole or, Aillwee Upper Cave	David Drew pers. comm.	525017, 704735	125050, 204701
Clare	CL004:086----	Ballyclilly	Pollballyclilly	Robin Sheen pers. comm.	514520, 705225	114550, 205191
Clare	CL009:059122-	Ballyganner South	Ballyganner South Cave	Self 1980	522894, 694893	122926, 194857
Clare	CL004:069----	Ballynahowna	Robber's Den –	Anderson and McCarthy 1991	510759, 702539	110789, 202505
Clare	CL041:071----	Barrick	Barrick Cave or, Cragmore Cave +	Scharff <i>et al.</i> 1906	532785, 673384	132820, 173344
Clare	CL041:060----	Cahiratha Beg	Alice and Gwendoline Cave or, Bull Paddock Cave –	Scharff <i>et al.</i> 1906	532145, 674830	132180, 174790
Clare	CL010:015004-	Castletown (Burren By.)	Castletown (Ballyconry) Cave	Self 1980	527653, 698431	127686, 198796
Clare	CL010:100005-	Clooncoose	Clooncoose Cave	Mullan 2003	527772, 695820	127805, 195784
Clare	CL041:056----	Edenvale	The Catcombs or, Boat Cave +	Scharff <i>et al.</i> 1906	532015, 674480	132050, 174440
Clare	CL006:023004-	Keelhillia	St. Colman's Bed or, Colman Mac Daugh's Cave –	Fahy 1911	532805, 704267	132839, 204233
Clare	CL041:064----	Newhall	Bats' Cave –	Scharff <i>et al.</i> 1906	532466, 673656	132501, 173616
Clare	CL041:063----	Newhall	Elderhush Cave +	Scharff <i>et al.</i> 1906	532447, 673574	132482, 173534
Clare	CL005:229----	Poolnabruckey	Christy's Cave	Lavender-Duncan <i>et al.</i> 2013	521942, 701408	121974, 201373
Clare	CL006:142----	Ternon	Ternon Cave +	Robin Sheen pers. comm.	539024, 701282	129057, 201247

Clare	CL010-054----	Tullycommon	Glencorran Cave +	Dowd 2007b, 2009	527340, 696383	127374, 196348
Cork	CO073-062002-	Ballincollig (Maskerry East By.)	Ballincollig Castle Cave +	Dowd 2013c	558716, 569874	158756, 069811
Cork	CO034-005005-	Ballymacmoy	Killavullen Cave 2 +	Top. Files, NMI	564727, 599772	164769, 099716
Cork	CO034-005002-	Ballymacmoy	Killavullen Cave 3 +	Martin 1935; Top. Files, NMI	564731, 599767	164773, 099710
Cork	CO034-005001-	Ballymacmoy	Killavullen Cave 4 +	Burke 1991	564731, 599787	164763, 099730
Cork	CO062-177002-	Blarney	The Dungeon +	Dowd 2014	560761, 575382	160802, 075321
Cork	CO076-079----	Carrigagour	Carrigagour Cave 1	Ussher 1880	591197, 571126	191219, 071044
Cork	CO076-079001-	Carrigagour	Carrigagour Cave 2	Ussher 1880	591179, 571104	191226, 071041
Cork	CO073-071----	Carrigane	Ovens Cave	Caulfield 1886; Coleman 1940; Top. Files, NMI	555068, 569880	155108, 069817
Cork	CO025-171----	Castlekevin	Killura Cave	Top. Files, NMI	562739, 601913	162771, 101857
Cork	CO026-106----	Connaberry	Connaberry Cave C +	Gwynn <i>et al.</i> 1942	568365, 602078	168408, 102022
Cork	CO026-150----	Connaberry	Foley Cave +	Gwynn <i>et al.</i> 1942	568477, 601529	168520, 101473
Cork	CO026-149----	Connaberry	Main Earth Cave +	Gwynn <i>et al.</i> 1942	568497, 601750	168540, 101694
Cork	CO077-077001-	Knockane	Knockane Cave	Crofton Croker 1824; Cahill 2006	598237, 574351	198286, 074289
Cork	CO076-004----	Park North	Park North Cave	Coleman 1942	588868, 574137	188915, 074075
Donegal	DG107-044004-	Abbey Island	Cansby Cave +	MacNeill 1982	587005, 862261	187051, 362261
Donegal	DG002-002003-	Ballygorman	The Wee House of Malin -	Ó Muirghis 1936	643228, 958124	243285, 458145
Dublin	DU012-007001-	Quay	Chink Well Cave +	Logan 1980	725899, 750111	325975, 250088
Fermanagh	FER209-004	Clogherbug	Loughnacloyduff Cave or Inscribed Cave +	Wakeman 1866/9	605080, 846363	205130, 346360
Fermanagh	FER191-082	Gortgor	Gillie's Hole	Wakeman 1866/9	608850, 830702	208900, 350700
Fermanagh	FER191-040	Knockmore	Lettered Cave +	Wakeman 1866/9	608790, 850472	208840, 350470
Fermanagh	FER191-079	Largalenny	Largalenny Cave	Davies 1934	609110, 853411	209160, 353410
Fermanagh	FER243-038	Legg	Pollthencarna +	Doughty 1995	612729, 833860	212780, 333855
Fermanagh	FER210-068	Moylehid	Scollan's Cave	Gamble 1946	614648, 842703	214700, 342700
Fermanagh	FER245-032	Sheehinny	Knockninny Cave +	Plunkett 1870/8, 1875/7	627186, 830026	227240, 330020
Fermanagh	FER191-140	Various	14 caves around Knockmore Mountain +	Plunkett 1876	606940, 848578	206990, 348576

Galway	GA009D006001-	Inishshark	St. Leo's Cave	Manning 2005	449803, 764020	049820, 263999
Kerry	KF039-023003-	Ballyegan (Trillickmaun By.)	Ballyegan Cave (destroyed)	Byrne 1991	496047, 611584	096074, 111530
Kerry	KF030-068----	Cloghennore	Cloghennore Cave +	Connolly <i>et al.</i> 2005	490510, 612816	090536, 112762
Kerry	KF092-035005-	Dunkerron	Dunkerron Cave	O'Sullivan and Sheehan 1996	488530, 576098	088555, 070035
Kerry	KF040-144----	Kilmurry (Trillickmaun By.)	Kilmurry Cave or, Faillán Aifinn	Top. Files, NMI	505337, 609395	105366, 109341
Kerry	KE028-041----	Lissodeige	Lissodeige Cave +	Tom Finn pers. comm.	476618, 617777	076640, 117724
Kerry	KF066-250----	Ross Island	Ross Island Cave +	O'Brien and Comber 2008	494790, 588450	094817, 088391
Kerry	KF098-123----	Shanaknock (An Seanchnoc)	Teampall na Seanaide	O'Sullivan and Sheehan 1996	453803, 563724	053820, 063660
Kilkenny	KK014-017----	Mohil	Donmore Cave or, Dent Ferra +	Foot 1870/1; Drew and Huddart 1980	650883, 665029	250944, 164987
Laois	LA019-021002-	Cloppock	Cloppock Cave	Manning 2005	658293, 690772	258355, 190736
Leitrim	LF010-065001-	Sramore	Sramore Cave +	Dowd 2008	Precise location unknown	Precise location unknown
Limerick	LI006-079001-	Annagh	Annagh Cave (destroyed)	O'Flahin 2011	569366, 658426	169409, 158383
Limerick	LI073-740----	Grange (Small County By.)	Grange Hill Cave +	O'Kelly unpublished	563477, 642611	167513, 142561
Limerick	LI015-069----	Killuragh	Killuragh Cave +	O'Shaughnessy 1994; Woodman 1997	578205, 649545	178250, 149500
Limerick	LI032-281----	Knockfennell	Red Cellar Cave +	Top. Files, NMI	564213, 641565	164255, 041518
Mayo	MA120-076----	Gorteenroe	Cat's Cave	Top. Files, NMI	511759, 755412	111789, 255329
Mayo	MA170-050----	Nymph's Field	Kelly's Cave +	Top. Files, NMI	515199, 755721	115730, 255698
Mayo	MA120-080----	Strandhill	The Lady's Buttery +	Gilhuys and Parker 1973	514960, 755166	114991, 255143
Monaghan	MO031-137001-	Cloghivally Lower	Creevy Cave +	Dowd <i>et al.</i> 2011	683355, 806247	283421, 306236
Ros- common	RO022-057031-	Glenballythomas	Cave of Crúachain (or Oweynagall) +	Condit and Moore 2003; Waddell <i>et al.</i> 2009	579529, 783138	179574, 283122
Sligo	SL014-290----	Carrowbarraun	Knocknarea Cave C +	Dowd and Kahler 2014	562006, 834920	162046, 334914
Sligo	SL014-288----	Carrowbarraun	Knocknarea Cave K +	Dowd and Kahler 2014	561957, 834939	161997, 334933
Sligo	SL839-054----	Cloonagh (Corran By.)	Kesh Caves +	Scharff <i>et al.</i> 1903; Gwynn <i>et al.</i> 1940; Dowd 2013b	570552, 812209	170594, 312199
Sligo	SL806-046----	Gleniff	Diarmuid and Gráinne's Cave	Wood Martin 1887/8, 1902	572420, 847134	172463, 347131
Sligo	SL015-102001-	Magheraghamish or Deer Park	Deerpark Cave +	Milligan 1890/1	Precise location unknown	Precise location unknown

Waterford	WA030-012002-	Ballygarabon Lower	Brothers' Cave	Forsyth 1931; Dowd and Corlett 2002	615524, 595321	215577, 095264
Waterford	WA030-087----	Ballynacourty (Decies without Drum Dy., Whitechurch Par.)	Ballynacourty quarry fissures	Martin 1935; Top. Files, NMI	c. 619702, 595379	c. 219756, 095422
Waterford	WA030-085----	Ballynacourty (Decies without Drum Dy., Whitechurch Par.)	Quintan's Quarry Cave (destroyed)	Top. Files, NMI	619437, 595408	219531, 095351
Waterford	WA030-016----	Ballynameelagh	Ballynameelagh Cave 1 (destroyed?)	Ussher 1886	c. 616619, 594979	c. 216672, 094922
Waterford	WA030-088----	Ballynameelagh	Ballynameelagh Cave 2 (destroyed?)	Adams <i>et al.</i> 1881; Forsyth 1909	c. 616619, 594979	c. 216672, 094922
Waterford	WA030-013----	Ballynaminta Lower	Ballynaminta Cave +	Adams <i>et al.</i> 1881	616355, 595956	216408, 095888
Waterford	WA030-015003-	Ballynaminta Middle	Carraigmurrish Cave +	Ussher 1886	616846, 595722	216809, 095565
Waterford	WA030-012001	Bridgequarter (Decies without Drum Dy.)	Oonaghour Cave +	Forsyth 1931; Dowd and Corlett 2002	615573, 595394	215526, 095337
Waterford	WA030-034----	Coolmanav	Uainchua Moot	Smith 1746	619100, 595610	219154, 095553
Waterford	WA030-018----	Kilgreany (Decies without Drum Dy.)	Kilgreany Cave 1	Trotman 1929; Moxley 1933; Dowd 2002	617571, 594443	217534, 094386
Wicklow	WI009-032001-	Dragoonhill	St. Kevin's Bed	Grogan and Kilfeather 1997	695915, 705174	293984, 205141
Wicklow	WI009-032002-	Dragoonhill	St. Kevin's Cave	Grogan and Kilfeather 1997	695907, 705162	293976, 205129
Wicklow	WI025-038----	Dunbar Head	Dunbar rock shelter	Martin 1932	733731, 695125	333810, 193090
Wicklow	WI023-021----	Lugduff	St. Kevin's Bed	Manning 2005	710545, 696131	310519, 196096

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